```
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

OM protein - protein search, using sw model

December 6, 2004, 15:19:38; Search time 27.5 Seconds (without alignments) 21.704 Million cell updates/sec Run on:

US-10-042-202-1 Perfect score:

1 HLGNVKYLV 9 Scoring table: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters:

478139 seqs, 66318000 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

/cgm2 6/ptcdata/1/iaa/5A_COMB.pep:*
/cgm2 6/ptcdata/1/iaa/5B_COMB.pep:*
/cgm2 6/ptcdata/1/iaa/6A_COMB.pep:*
/cgm2 6/ptcdata/1/iaa/6B_COMB.pep:*
/cgm2 6/ptcdata/1/iaa/PcTUS_COMB.pep:*
/cgm2 6/ptcdata/1/iaa/PcTUS_COMB.pep:* Issued Patents AA:*

Pred. No. is.the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	æ					
Score	Query	Length	DB	. QI	Description	
48	100.0	6	4	US-09-454-204A-20	20,	
48	100.0	229	4	US-09-454-204A-41	41,	
48	100.0	559	Н	-08	14,	
40	83.3	15	4	US-09-009-953-44	44,	
39	81.2	133	Н	US-07-846-992-3	3,	
39	81.2	133	Н		ω,	
37	77.1	265	4	•	761	
36	75.0	376	4	US-09-248-796A-18937		
36	75.0	439	m		7	
36	75.0	446	m		4.	
36	75.0	577	4	-60-	(A	
34	70.8	150	m	US-09-228-986-107	107,	
34	70.8	150	4	US-10-101-464A-107	107,	
34	70.8	301	٦	US-08-420-235B-47	47, A	
34	70.8	301	~	US-08-343-101A-22	22,	
34	70.8	301	m		22,	
34	70.8	301	m	- 1	47,	
34	70.8	301	4	US-09-519-489-22	22,	
34	70.8	206	7	US-08-929-501-2	2,7	
34	70.8	206	m	US-09-140-177-2	~	
34	70.8	206	m	US-09-397-979-2	7	
34	70.8	290	~	US-08-929-501-12	12,	
34	70.8	590	ო	9-140	12,	
34	70.8	590	m	-397	12,	
34	70.8	1166	4	US-10-101-464A-900	900,	
33	68.8	61	4	US-09-248-796A-22949	22949	
33	68.8	94	4	US-09-513-999C-5607		
	0 -		Mare to the state of the state	Match Length 100.0 229 100	Match Length DB ID Match Length DB ID 100.0 9 4 US-09-454-204A-21 100.0 229 4 US-09-454-204A-41 100.0 229 4 US-09-454-204A-41 100.0 229 4 US-09-454-204A-41 100.0 229 4 US-09-454-204A-41 100.0 229 4 US-09-454-36B-14 81.2 133 1 US-09-352-34 81.2 133 1 US-09-248-992-3 75.0 439 3 US-09-248-796A-1893 75.0 446 3 US-09-248-796A-1893 75.0 439 3 US-09-252-991A-2071 70.8 301 1 US-08-420-235B-47 70.8 301 2 US-08-343-101A-22 70.8 301 3 US-09-254-79 70.8 301 3 US-09-219-489-22 70.8 506 2 US-08-397-979-2 70.8 507 3 US-09-397-979-12 70.8 508 3 US-09-397-979-12 70.8 509 3 US-09-397-979-12 70.8 500 3 US-09-397-979-12 70.8 500 3 US-09-397-979-12 70.8 500 3 US-09-397-979-12 70.8 68.8 61.8 61.8 62.9 62.8 63.9 63.9 63.9 63.9 64.0 65.9 66.8 66.8	Match Length DB ID Match Length DB ID Match Length DB ID 100.0 229 4 US-09-454-204A-20 100.0 229 4 US-09-454-204A-41 100.0 229 4 US-09-353-44 81.2 133 1 US-09-0955-4 81.2 133 1 US-09-0953-44 81.2 133 1 US-09-09-355-3 81.2 265 4 US-09-248-796A-18937 75.0 376 4 US-09-248-796A-18937 75.0 376 4 US-09-248-796A-18937 75.0 439 3 US-09-228-986-107 75.0 577 4 US-09-252-991A-20716 75.0 577 4 US-09-252-991A-20716 76.0 577 4 US-09-252-991A-20716 8 301 1 US-08-391-09-22 8 500 2 US-09-391-09-22 8 500 2 US-09-391-09-22 8 500 3 US-09-397-97-97 8 500 3 US-09-397-979-12 8 500 3 US-09-397-979-12 8 500 0 US-09-397-970-12 8 500 0 U

774	Sequence 2, Appli	Sequence 8, Appli	Sequence 8, Appli	Sequence 8, Appli	Sequence 29, Appl	Sequence 30, Appl	Sequence 6, Appli	Sequence 7, Appli	Sequence 9, Appli	Sequence 13, Appl	24,	29,	Sequence 3, Appli	4,	e,	Sequence 4, Appli	27,
US-09-513-999C-7746	US-09-366-623-2	US-08-015-973-8	US-08-448-164-8	US-08-081-929-8	US-08-793-410-29	US-08-793-410-30	US-08-793-410-6	US-08-793-410-7	US-09-064-411A-9	US-09-064-411A-13	US-08-464-523B-24	US-08-464-523B-29	US-08-440-845D-3	US-08-440-845D-4	US-08-868-458-3	US-08-868-458-4	US-08-464-523B-27
4.0		-	~	m	~	~	~	~	m	ო	Н	Н	~	~	ო	m	-
128	162	262	262	262	324	324	328	328	330	332	375	383	411	411	411	411	415
8.89	8.89	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	8.89	68.8	68.8	68.8	68.8	68.8	68.8
33	m e	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

```
APPLICANT: McMichael, Andrew

APPLICANT: Hill, Addinan V.S.
APPLICANT: Hill, Addinan V.S.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Schneider, Jorg
APPLICANT: Schneider, Jorg
APPLICANT: Plebanski, Magdalena
APPLICANT: Blanchard, Tom
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
FILE REFERENCE: 2907.1000-000
CURRENT APPLICATION NUMBER: PCT/GB98/01681
PRIOR FILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-06-09
PRIOR FILING DATE: 1997-06-09
PRIOR FILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 78
SOFTWARE: FastSEQ for Windows Version 4.0
SEG ID NO 20
LENGTH: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: CTL Epitope of the Malaria String US-09-454-204A-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 48; DB 4; I 100.0%; Pred. No. 3.8e+05; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Unknown
RESULT 1
US-09-454-204A-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
```

δ

ö

σ 1 HLGNVKYLV 9 1 HLGNVKYLV

g

Sequence 41, Application US/09454204A Patent No. 6663871 GENERAL INFORMATION: APPLICANT: McMichael, Andrew APPLICANT: Hill, Adrian V.S. APPLICANT: Gilbert, Sarah C. APPLICANT: Schneider, Jorg US-09-454-204A-41 RESULT 2

```
ö
                                                                                                    o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                           S-US-VO-3-3-3-4.
Sequence 44, Application US/09009953
Patent No. 6413517
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Sette, Alessandro
TITLE OF INVENTION: Identification of Broadly
Reactive DR Restricted Epitopes
                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 274
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
CITY: San Francisco
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTEY: USA
ZIP: 94111-3834
COMPUTER READABLE PORM:
COMPUTER: DISKette
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: DOS
SOFTWARE: FASTEN: DOS
SOFTWARE: 21-7an-1998
FILING DATE: 21-7an-1998
CLASSIFICATION NUMBER: US 60/036,713
FILING DATE: 23-7aN-1997
FILING DATE: 23-7aN-1997
APPLICATION NUMBER: US 60/037,432
FILING DATE: 07-FEB-1997
ATTORNEY/AGENT INFORMATION:
APPLICATION NUMBER: US 60/037,432
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-011520US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          83.3%; Score 40; DB 4;
100.0%; Pred. No. 0.092;
                                                              100.0%; Score 48; DB 1, 100.0%; Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 44:
US-09-009-953-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
US-07-846-992-3
Sequence 3, Application US/07846992
; Patent No. 5583046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 415-576-0200
TELEFAX: 415-576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 15 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: «Unknown»
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.
Matches 8; Conservative
                                                                   Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                             3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 LGNVKYLV 9
                                                                                                                                                                1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 LGNVKYLV
, ANTI-SENSE: NO
US-08-313-288B-14
                                                                                                                                                                                                                                                                                     RESULT 4
US-09-009-953-44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                       δ
                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
               APPLICANT: FLEUGUISKI, MayGalena
APPLICANT: Hanke, Tomas
APPLICANT: Smith, Geoffery L.
APPLICANT: Smith, Geoffery L.
TITLE OF INVENTION: Methods and Reagents for Vaccination
TITLE OF INVENTION: Michol Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: WHORE: 1990-12-09
CURRENT APPLICATION NUMBER: PCT/GB98/01681
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: GB 97 11957.2
PRIOR PLING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 78
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 41
LENGTH: 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 14, Application US/08313288B

Sequence 14, Application US/08313288B

Patent No. 5760502

GENERAL INFORMATION:
APPLICANT: Jessell, Thomas M. and Avihu Klar
APPLICANT: Jessell, Thomas M. and Avihu Klar
TITLE OF INVENTION: CLONING, EXPRESSION AND USES OF A
TITLE OF INVENTION: NOVEL SECRETED PROTEIN, F-SPONDIN
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSES: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10336
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/313, 288B
FILING DATE: January 5, 1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REBERENCE/DOCKET NUMBER: 28,678
REBERENCE/DOCKET NUMBER: 28,678
REBERENCE/DOCKET NUMBER: 28,678
RELEPHONE: (212) 278-0400
TELLEPHONE: (212) 278-0400
TELLEPHONE: (212) 391-0526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 100.0%; Score 48; DB 4; Length 229; Best Local Similarity 100.0%; Pred. No. 0.045; Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Complete Epitope of Malaria String US-09-454-204A-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 14: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 559 amino acids
amino acid
EDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88 HLGNVKYLV 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 3
US-08-313-288B-14
```

g ઠે

```
ORGANISM: Betula verrucosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 133 amino acida TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: peptide
HYDOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ||| :||:|
68 HLGGIKYMV 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-469-555-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Amino acid sequence identity with profilin of other organisms is as follows: 30% with human profilin, 28% with calf and mouse, 26% with yeast and 25% with Acanthamoeba
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
           APPLICANT: Duchene, Michael
APPLICANT: Pettenburger, Karin
APPLICANT: Breitenbach, Michael
APPLICANT: Kreit, Dietrich
APPLICANT: Kreit, Dietrich
APPLICANT: Rumpold, Helmut
APPLICANT: Scheiner, Otto
TITLE OF INVENTION: Birch Pollen Allergen P14 for Diagnosis
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81.2%; Score 39; DB 1; Length 133; 66.7%; Pred. No. 1.7; 1.7; 1.1ve 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPERATIONS SYSTEM:
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 19920606
CLASSIFICATION: 435
PRIOR APPLICATION 1435
PRIOR APPLICATION NUMBER: US 07/353,844
FILING DATE: 18-MAY-1992
ATTORNEY/AGENT INPORMATION:
NAME: JOHNE II HATTY C
REGISTRATION NUMBER: 20,280
REGISTRATION NUMBER: 20,280
REGISTRATION NUMBER: 20,280
REGISTRATION NUMBER: 20,280
REJECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFRAK: (212) 869-8664/9741
                                                                                                                                                                                                                                        ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3, Application US/08469555; Patent No. 5648242; GENERAL INFORMATION:
APPLICANT: Valenta, Rudolf
APPLICANT: Duchene, Michael
APPLICANT: Pettenburger, Karin; APPLICANT: Breitenburger, Karin; APPLICANT: Kraft, Dietrich
                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Betula verrucosa
                                                                                                                                                                                                                                                                                                    STATE: New York
COUNTRY: U.S.A.
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (212) 869-8864/97
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
Valenta, Rudolf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 133 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 66.70
Para 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||| :||:|
HLGGIKYMV 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-07-846-992-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
US-08-469-555-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amino acid sequence identity with profilin of other organisms is as follows: 30% with human profilin, 28% with calf and mouse, 26% with yeast and 25% with Acanthamoeba
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
APPLICANT: Rumpold, Helmut
APPLICANT: Scheiner, Otto
TITLE OF INVENTION: Birch Pollen Allergen Pl4 for Diagnosis
TITLE OF INVENTION: and Therapy of Allergic Diseases
NUMBER OF SEQUENCES: 11
CORRESSER: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
TITLE OF INVENTION: Edmonds
STREET: 1155 Avenue of the Americas
TITLE OF STREET: Pennie & Edmonds
STRATE: New York
STRATE: New York
STRATE: New York
STRATE: Percent Release #1.0, Version #1.25
COUNTRY: U.S.A.
ZIP: 10036-2711
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COUNTRY: U.S.A.
SOFTWARE: Petentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA: BC-1092
SOFTWARE: Petentin Release #1.0, Version #1.25
TILING DATE: 06-JUN-1995
CLLASSIFICATION NUMBER: US/07/846,992
FTLING DATE: 06-JUN-1992
APPLICATION NUMBER: US/07/846,992
FTLING DATE: 18-MAY-1992
APPLICATION NUMBER: US/07/846,992
FTLING DATE: 18-MAY-1992
APPLICATION NUMBER: US/07/846,992
FTLING DATE: 11-1992
ATTORNEY AGENT INFORMATION:
TELEPAM: (212) 790-9090
TELEPAM: (212) 790-9090
TELEPAM: (212) 780-8064
TELECOMMUNICATION INFORMATICS:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
INFORMATION POR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
INFORMATION POR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
INFORMATION POR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    h Similarity 66.7%; Pred. No. 1.7; 6; Conservative 2; Mismatches 1; Indels
```

g ò

```
Sequence 20116, Application US/09252991A

Sequence 20116, Application US/09252991A

Sequence 20116, Application US/09252991A

GENERAL INFORMATION:
APPLICANT: MAIC J. Rubenfield et al.
APPLICANT: MAIC J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR SEQ ID NOS: 33142

SEQ ID NO 20716

LENGTH: 577
                                                                                                                                                        RESULT 10
US-09-004-393B-4

i Sequence 4, Application US/09004393B

j Patent No. 6310271

i GENERAL INVENDENT

i APPLICANT: Hanson D., Andrew

j APPLICANT: Burnet, Michael

i TITLE OF INVENTION: Polymuclectides Encoding Choline Monooxygenase and

TITLE OF INVENTION: Plants Transformed Therewith

i FILE REFERENCE: UP-162

CURRENT APPLICATION NUMBER: US/09/004,393B

CURRENT FILING DATE: 1998-01-08

NUMBER OF SEQ ID NOS: 6

SOUTHWARE: Patentin Ver. 2.0

SEQ ID NO 4

LENGTH: 446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
Gaps
..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  75.0%; Score 36; DB 3; Length 446; 87.5%; Pred. No. 28; tive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 36; DB 4; Length 577; Pred. No. 37; 2; Mismatches 0; Indels
Indels
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
US-09-228-986-107
; Sequence 107, Application US/09228986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , ORGANISM: Pseudomonas aeruginosa US-09-252-991A-20716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 75.0%;
Best Local Similarity 75.0%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best_Local Similarity 87.5
Matches 7; Conservative
  7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Beta vulgaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   105 LGNIRYLV 112
                                                                       140 LGNVEYLV 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||||:|||
147 LGNVEYLV 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 LGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 LGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-09-252-991A-20716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-004-393B-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                             Sequence 18937, Application US/09248796A

Sequence 18937, Application US/09248796A

Setent No. 6747137

GENERAL INFORMATION:

APPLICANT: Keith Weinstock et al

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN

TITLE OF INVENTION: POR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: POR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 1999-12

CURRENT APPLICATION NUMBER: US 60/094,725

PRIOR FILING DATE: 1998-02-13

PRIOR FILING DATE: 1998-02-13

PRIOR FILING DATE: 1998-08-13

NUMBER OF SEQ ID NOS: 28208

SEQ ID NO 18937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: UNSURE
LOCATION: (1599)
LOCATION: (1599)
US-09-248-796A-18937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:

APPLICANT: Hands D., Andrew
APPLICANT: Hands D., Andrew
APPLICANT: Burnet, Michael
TITLE OF INVENTION: Polynucleotides Encoding Choline Monooxygenase and
TITLE OF INVENTION: Plants Transformed Therewith
FILE REFERENCE: UF-162
CURRENT APPLICATION NUMBER: US/09/004,393B
CURRENT FILING DATE: 1998-01-08
PRIOR FILING DATE: 1997-01-08
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                            .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 36; DB 3; Length 439;
Pred. No. 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 75.0%; Score 36; DB 4; Length 376; Best Local Similarity 75.0%; Pred. No. 23; Matches 6; Conservative 2; Mismatches 0; Indels
                                                                                            Score 37; DB 4; Length 265; 
Pred. No. 9.7;
                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/09004393B
Patent No. 6310271
                     ) ORGANISM: Acinetobacter baumannii US-09-328-352-7616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75.0%;
87.5%;
                                                                                               77.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT
; ORGANISM: Spinacia oleracea
US-09-004-393B-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Candida albicans
                                                                                               Query Match 77.1
Best Local Similarity 77.8
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     126 HLGSLKYL 133
                                                                                                                                                                                                                                 81 HLGEVSYLV 89
                                                                                                                                                                                         1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HLGNVKYL 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-004-393B-2
       TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 34; DB 1; Length 301;
Pred. No. 46;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Chang, Yuan
APPLICANT: Chang, Yuan
APPLICANT: Moore, Patrick S.
TITLE OF INVENTION: Unique Associated Kaposi's Sarcoma
TITLE OF INVENTION: Virus Sequences And Uses Thereof
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS: ADDRESS: Cooper & Dunham
STREET: 1185 Avenue of the Americas
       CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 45185-B
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Release #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/420,235B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/343,101A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-343-101A-22
; Sequence 22, Application US/08343101A
; Patent No. 5830759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patentin Release #1.24
                                                                                                                                                                                  COMPUTER READABLE FORM:
REDIUM TYPE: Floppy disk
CMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
INFORMATION FOR SEQ ID NO: 47:
SEQUENCE CHARACTERISTICS:
LENGTH: 301 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: White Esq., John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 70.8%;
Best Local Similarity 75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; MOLECULE TYPE: protein US-08-420-235B-47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  175 HLGSVSYL 182
                                                       STREET: 1185 Aver
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 HLGNVKYL 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: New York
STATE: New York
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WESULI 101-464A-107

Sequence 107, Application US/10101464A

Patent No. 678041

GENERAL INFORMATION:

APPLICANT: Strabala, Timothy
APPLICANT: Nieuwenhuizen, Nicolaas
APPLICANT: Higgins, Colleen M.

TITLE OF INVENTION: and Their Use in the Modification of Plant Cells
FILE REPRERENCE: 11000.1020c2

CURRENT APPLICATION NUMBER: 09/704/302

PRIOR FILING DATE: 2000-11-01

PRIOR PILING DATE: 2000-11-01

PRIOR FILING DATE: 1999-01-12

PRIOR FILING DATE: 2000-11-01

PRIOR FILING DATE: 1999-11-01

PRIOR FILING DATE: 2000-01-11

PRIOR FILING DATE: 2000-01-11

PRIOR FILING DATE: 2000-01-11
GENERAL INFORMATION:
APPLICANT: Strabala, Timothy
APPLICANT: Nieuwenhuizen, Niels
APPLICANT: Nieuwenhuizen, Niels
TITLE OF INVENTION: Compositions Isolated from Plant Cells
TITLE OF INVENTION: and Their Use in the Modification of Plant Cell Signalling
FILE REFERENCE: 11000/1020
CURRENT APPLICATION NUMBER: US/09/228,986
CURRENT FILING DATE: 1999-01-12
NUMBER OF SEQ ID NOS: 130
SOFTWARE: FREASEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 47, Application US/08420235B
Patent No. 5801042
GENERAL INFORMATION:
APPLICANT: Chang, Yuan
APPLICANT: Moore, Patrick S.
TITLE OF INVENTION: UNIQUE ASSOCIATED KAPOSI'S SARCOMA VIRUS
TITLE OF INVENTION: SEQUENCES AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 70.8%; Score 34; DB 3; Length 150; Best Local Similarity 62.5%; Pred. No. 21; Matches 5; Conservative 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 70.8%; Score 34; DB 4; Length 150; Best Local Similarity 62.5%; Pred. No. 21; Matches 5; Conservative 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 989
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 107
                                                                                                                                                                                                                                                                                                             ; TYPE: PRT
; ORGANISM: Pinus radiata
US-09-228-986-107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Pinus radiata
US-10-101-464A-107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ||||: :|
101 HLGNISFL 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101 HLGNISFL 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HLGNVKYL 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 HLGNVKYL 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14
US-08-420-235B-47
                                                                                                                                                                                                                                                           SEQ ID NO 107
LENGTH: 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
```

g

ó

Sequence 118, App Sequence 119, App Sequence 119, App Sequence 158, Ap Sequence 119, App Sequence 119, App Sequence 20, Appl Sequence 20, Appl Sequence 71929, A Sequence 7352, Ap

Sequence:

Run on:

Searched:

Sequence 68210, A Sequence 46541, A Sequence 233099,

Sequence 63190, A Sequence 55223, A Sequence 58005, A

Sequence 41, Appl Sequence 41, Appl Sequence 41, Appl Sequence 164906, Sequence 44, Appl Sequence 44, Appl

Sequence

```
Sequence 1, Application US/10042202
Publication No. US20020136733A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
Catherine Elizabeth Margaret ALLSOPP, Ajit LALVANI, Magdalena PLEBANSKI, Hilton Carter WHITTLE,
TITLE OF INVENTION: MALARIA PEPTIDES
NUMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:
ADDRESSER: WENDEROYH, LIND & PONACK, L.L.P.
STREET: 2033 K Street, N.W., Suite 800,
CITY: Washington
STANDEL: D.C.
6 US-10-653-624-41
6 US-10-833-439-41
7 US-10-833-745-41
7 US-10-833-744-41
7 US-10-833-744-41
7 US-10-833-744-41
7 US-10-83-744-41
7 US-10-86-943-41
8 US-10-10-395-44
8 US-10-10-395-44
9 US-10-287-226-318
9 US-10-287-226-318
9 US-10-36-56-158
9 US-10-36-56-158
9 US-10-389-56-158
9 US-10-389-56-1189
9 US-10-282-122A-66501
9 US-10-282-122A-66501
9 US-10-767-714-631909
9 US-10-425-114-53039
9 US-10-425-114-58039
9 US-10-425-114-58039
9 US-10-425-114-631908
9 US-10-425-114-631908
9 US-10-425-114-631908
9 US-10-425-114-631908
9 US-10-425-114-631908
9 US-10-425-114-631908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/714,175
APPLICATION NUMBER: 08/9406492.0
FILING DATE: 31-MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: WATTEN M CDEEK, Jr.
REGISTRATION NUMBER: 33,367
REFERENCE/DOCKET NUMBER: 2002_0026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: U.S.A.
ZIP: 20006-1021
COMPUTER READABLE FORM:
MEDIUM TYPE: Floopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: WordPad for Windows 95
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/042,202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ALIGNMENTS
     229
229
2299
2299
312
312
312
443
443
443
536
536
6199
623
   US-10-042-202-1
      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                          December 6, 2004, 15:26:21 ; Search time 99 Seconds (without alignments) 32.420 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence Sequence Sequence S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PUDLIBRICA APPLICATIONS AND TO THE COMB. DED: *

(cgn2_6/ptodata/1/pubpaa/US07_PUBCCMB. DED: *

(cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB. DED: *

(cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB. DED: *

(cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB. DED: *

(cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB. DED: *

(cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB. DED: *

(cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB. DED: *

(cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB. DED: *

(cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB. DED: *

(cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB. DED: *

(cgn2_6/ptodata/1/pubpaa/US0B_PUBCOMB. DED: *

(cgn2_6/
                  GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-042-202-1

US-10-079-167-20

US-10-653-624-20

US-10-873-439-20

US-10-873-445-20

US-10-873-745-20

US-10-877-217-508

US-10-877-217-508

US-10-686-943-20

US-10-079-167-89

US-10-079-167-89

US-10-079-167-89
                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                         1582122 seqs, 356623098 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Published_Applications_AA:*
                                                                                OM protein - protein search, using sw model
                                                                                                                                                                                                                                           BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                           US-10-042-202-1
                                                                                                                                                                                                         1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0
                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database :
```

Result Š.

1, Appli 2, Appli 5684, Ap

Sequence Sequence Sequence

Sequence 165, App Sequence 108, App Sequence 108, App Sequence 58005, A Sequence 69639, A

```
APPLICANT: Schneider, John APPLICANT: Schneider, John APPLICANT: Schneider, John APPLICANT: Plebanski, Magdalena APPLICANT: Plebanski, Magdalena APPLICANT: Banth, Tomas APPLICANT: Smith, Geoffrey L. APPLICANT: Blanchard, Tom TITLE OF INVENTION: Methods and Reagents for Vaccination TITLE OF INVENTION: Micho Generate A CD8 T Cell Immune Response TITLE REFERENCE: 2907.1000-000 CURRENT APPLICATION NUMBER: US/10/653,624 CURRENT PILLING DATE: 2003.09-02 PRIOR FILING DATE: 1999-12-09 PRIOR FILING DATE: 1999-12-09 PRIOR FILING DATE: 1998-06-09 PRIOR FILING DATE: 1998-06-09 PRIOR PRILING DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 PRIOR FILING DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHARE: PSEC FOR WINDOWS VERSION 4.0 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 78 LENGTHUS DATE: 1997-06-09 NUMBER OF SEQ ID NOS: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: CTL Epitope of the Malaria String
US-10-653-624-20
Gilbert, Sarah C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 48; DB 14; Length 9; 100.0%; Pred. No. 1.4e+06; Ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 48; DB 13; Length 9; 100.0%; Pred. No. 1.4e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: CTL Epitope of the Malaria String
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20, Application US/10079167
Sequence 20, Application US/10079167
Sequence 20, Application US/10079167
Sequence 20, Application US/10079167
SERNERAL INFORMATION:
APPLICANT: Hill, Adrian V.S.
APPLICANT: McShane, Helen
APPLICANT: Reece, William
APPLICANT: Schneider, Joerg
ITILE OF INVENTION: Vaccination Method
FILE REPERBNCE: 2907.1000-001
CURRENT FILING DATE: 2002-02-19
FRIOR APPLICATION NUMBER: US 09/454,204
FRIOR FILING DATE: 1999-12-09
FRIOR FILING DATE: 1998-06-09
FRIOR FILING DATE: 1998-06-09
FRIOR FILING DATE: 1998-06-09
FRIOR FILING DATE: 1997-06-09
FRIOR FILING DATE: 1997-06-09
FRIOR FILING DATE: 2001-09-13
FRIOR FILING DATE: 2001-09-13
FRIOR FILING DATE: 2001-09-13
FRIOR FILING DATE: 2001-09-21
NUMBER OF SEQ ID NOS: 99
LINNGRANE: PARESEQ for Windows Version 4.0
SEQ ID NO 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                               TOPOLOGY: Linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-10-042-202-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-653-624-20
Sequence 20, Application US/10653624
Publication No. US20040131594A1
GENERAL INFORMATION:
APPLICANT: McMichael, Andrew
APPLICANT: Hill, Adrian V.S.
                 TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)-721-8200
TELEFAX: (202)-721-8250
                                                                                                                                                                                                                                                                      TYPE: amino acid
STRANDEDNESS: <Unknown>
                                                                                                                                                                                                                                      LENGTH: 9 amino acids
                                                                                                                      INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.0
Matches 9, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |||||||||
1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-079-167-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -10-079-167-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
```

Gaps

ö

100.0%; Score 48; DB 16; Length 9; 100.0%; Pred. No. 1.4e+06; tive 0; Mismatches 0; Indels

```
US-10-7/7-053-508

Sequence 508, Application US/1077053

Publication No. US20040132088A1

Publication No. US20040132088A1

GENERAL INFORMATION:

APPLICANT: Diamond, David C.

APPLICANT: Diamond, David C.

APPLICANT: Diamond, David C.

APPLICANT: Lei, Xiang-Dong

APPLICANT: Lei, Xiang-Dong

APPLICANT: Lei, Xiang-Dong

TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF

TITLE OF INVENTION: EXPRESSION VECTORS AND METHODS FOR THEIR DESIGN

TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN

TITLE OF INVENTION: 2004-02-10

PRIOR EPILING DATE: 2004-01-07

PRIOR PILING DATE: 2001-11-07

PRIOR PILING DATE: 2001-11-07

PRIOR PILING DATE: 2001-11-07

NUMBER OF SEQ ID NOS: 979

SEQ ID NO 508

LENGTH: 9

LENGTH: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0%; Pred. No. 1.4e+06;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Plasmodium Faciparum
US-10-777-053-508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 HLGNVKYLV 9
1 HLGNVKYLV 9
                                               1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
US-10-833-439-20
```

```
Sequence: 508, Application US/10837217
Publication No. US20040203051A1
GENERAL INFORMATION:
APPLICANT: Simard, John J. L.
APPLICANT: Diamond, David C.
APPLICANT: Diamond, David C.
APPLICANT: Lei, Xiang-Dong
TITLE OF INVENTION: EXPRESSION VECTORS ENCODING EPITOPES OF
TITLE OF INVENTION: TARGET-ASSOCIATED ANTIGENS AND METHODS FOR THEIR DESIGN
FILE REPERBNCE: MANNK. 02222
CURRENT APPLICATION NUMBER: US/10/837,217
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INCRMATION:
GENERAL INCRMATION:
GENERAL INCRMATION:
APPLICANT: Hill, Adrian V.S.
APPLICANT: Hill, Adrian V.S.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Schneider, Jorg
APPLICANT: Schneider, Jorg
APPLICANT: Plebanski, Magdalena
APPLICANT: Plebanski, Magdalena
APPLICANT: Blanchard, Tomas
APPLICANT: Smith, Geoffrey L.
APPLICANT: Mich Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Mich Generate A CD8 T Cell Immune Response
FILE REFERENCE: 2907.1000-000
CURRENT FILING DATE: 2003-10-16
PRIOR FILING DATE: 2003-10-16
PRIOR FILING DATE: 1999-12-09
PRIOR FILING DATE: 1998-06-09
PRIOR FILING DATE: 1998-06-09
PRIOR FILING DATE: 1998-06-09
NUMBER OF SEQ ID NOS: 78
SOFTWARE: PARLES FARLES (for Windows Version 4.0)
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                       Length 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 9;
                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                          ORGANISM: Unknown FATURE: CTL Epitope of the Malaria String US-10-833-745-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: CTL Epitope of the Malaria String US-10-833-744-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 48; DB 17;
100.0%; Pred. No. 1.4e+06;
ative 0; Mismatches 0;
                                                                                                                                               Query Match
100.0%; Score 48; DB 17;
Best Local Similarity 100.0%; Pred. No. 1.4e+06;
Matches 9; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20, Application US/10833744 Publication No. US20040197349A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                  1 HLGNVKYLV 9
                                                                                                                                                                                                                                                        1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-837-217-508
                                                                                                                                                                                                                                                                                                                                                                                                          US-10-833-744-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DESIGNATION OF US20040191272A1

SEQUENCE 20, Application US/10833745

Publication No. US20040191272A1

GENERAL INPOMATION:

APPLICANT: Hill, Adrian V.S.

APPLICANT: Gilbert, Sarah C.

APPLICANT: Schneider, Jords

APPLICANT: Schneider, Jords

APPLICANT: Blanchard, Tomas

APPLICANT: Blanchard, Tomas

APPLICANT: Blanchard, Tomas

APPLICANT: Blanchard, Tomas

APPLICANT: Blanchard, Towas

APPLICANT: Blanchard, Towas

APPLICANT: Which Generate A CD8 T Cell Immune Response

FILE OF INVENTION: Which Generate A CD8 T Cell Immune Response

FILE REFERENCE: 2907.1000-000

CURRENT FILING DATE: 2003-10-16

FRIOR FILING DATE: 2003-10-16

PRIOR FILING DATE: 1999-06-09

NUMBER OF SEQ ID NOS: 78

SOFTWARE: PASLESEQ for Windows Version 4.0

LENGTH: 9
                                                                                                                                                                                      APPLICANT: Hanks, restaurant, restaurant, restaurant, restaurant, restaurant, restaurant, restaurant, restaurant, restaurant, deoffreey L.
APPLICANT: Blanchard, Tom
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
FILE REFRERENCE: 2907.1000-000
CURRENT APPLICATION NUMBER: US/10/686,943
PRIOR APPLICATION NUMBER: US/10/686,943
PRIOR APPLICATION NUMBER: US/09/454,204
PRIOR PILING DATE: 2003-10-16
PRIOR PILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-12-09
PRIOR FILING DATE: 1998-06-09
PRIOR FILING DATE: 1998-06-09
PRIOR FILING DATE: 1998-06-09
NUMBER OF SEQ ID NOS: 78
SEQ ID NO S: 78
SEQ ID NO S: 78
SEQ ID NO S: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 48; DB 16; Length 9
Best Local Similarity 100.0%; Pred. No. 1.4e+06;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
; CTHER INFORMATION: CTL Epitope of the Malaria String US-10-833-439-20
Sequence 20, Application US/10833439
Publication No. US20040175365A1
GENERAL INFORMATION:
                                                                                                   Hill, Adrian V.S.
Gilbert, Sarah C.
Schneider, Jorg
Plebanski, Magdalena
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
US-10-833-745-20
```

à а

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: MACACABEL, ANGLEW
APPLICANT: Hill, Adrian V.S.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Schneider, Jorg
APPLICANT: Schneider, Jorg
APPLICANT: Planke, Tomas
APPLICANT: Blanchard, Tom
APPLICANT: Blanchard, Tom
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Methods and Reagents for Vaccination
TITLE OF INVENTION: Mobic Generate A CD8 T Cell Immune Response
FILE REFERENCE: 2907.1000-000.
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Mobic Generate A CD8 T Cell Immune Response
FILE REFERENCE: 2907.100-000-00
CURRENT FILING DATE: 2003-10-16
PRIOR APPLICATION NUMBER: US/09/454,204
PRIOR PILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-06-09
PRIOR FILING DATE: 1999-06-09
PRIOR FILING DATE: 1997-06-09
PRIOR FILING DATE: 1997-06-09
PRIOR FILING DATE: 1997-06-09
PRIOR PRIOR PRIOR OF TREATMENT OF TREAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 48; DB 17; Length 9; 100.0%; Pred. No. 1.4e+06; tive 0; Mismatches 0; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.0%; Pred. No. 1.4e+06;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 6, Application US/10360836; Bequence 6, Application No. US20030185854A1; GENERAL INFORMATION: APPLICANT: Zavala, Fidel APPLICANT: Ashley TITLE OF INVENTION: USE OF RECOMBINANT HEPATITIS B CORE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                , OTHER INFORMATION: CTL Epitope of the Malaria String US-10-686-943-20
CURRENT FILING DATE: 2004-04-30
PRIOR APPLICATION NUMBER: 10/292,413
PRIOR FILING DATE: 2002-11-07
PRIOR APPLICATION NUMBER: 60/336,968
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 979
SOFTWARE: FactSEQ for Windows Version 4.0
SEQ ID NO 508
LENGTH: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          110-686-943-20
Sequence 20, Application US/10686943
Sequence 10, Application No. US20040213799A1
APPLICANT: MCMichael, Andrew
                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT
; ORGANISM: Plasmodium Faciparum
US-10-837-217-508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 10
US-10-360-836-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
TITLE OF INVENTION: PARTICLES TO DEVELOP VACCINES AGAINST INFECTIOUS PATHOGENS
TITLE OF INVENTION: AND MALIGNANCIES
FILE REFERENCE: 5986/10876
CURRENT APPLICATION NUMBER: 02,10/360,836
CURRENT FILING DATE: 2002-07
PRIOR APPLICATION NUMBER: 60/354,963
PRIOR FILING DATE: 2002-08
NUMBER OF SEQ ID NOS: 86
SOFTWARE: FastERQ for Windows Version 3.0
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Peptide No. US20030138454A1 1 in the TT1-10 pool
US-10-079-167-89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 48; DB 14; Length 20; 100.0%; Pred. No. 0.026; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0%; Score 48; DB 14; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.019;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-0/2-16/-2

Sequence 89, Application US/10079167

Publication No. US20030138454A1

GENERAL INFORMATION:

APPLICANT: Hill, Adrian V.S.

APPLICANT: Gilbert, Sarah C.

APPLICANT: Reece, William

APPLICANT: Schneider, Joerg

TILE REPERBNCE: 2907.1000-001

CURRENT APPLICATION NUMBER: US/10/079,167

CURRENT FILING DATE: 2002-02-19

PRIOR PILING DATE: 1999-12-09

PRIOR PILING DATE: 1999-12-09

PRIOR PILING DATE: 1998-06-09

PRIOR PILING DATE: 1998-06-09

PRIOR PILING DATE: 1997-06-09

PRIOR PILING DATE: 1997-06-09

PRIOR PILING DATE: 1997-06-09

PRIOR PILING DATE: 1997-06-09

PRIOR PILING DATE: 2001-09-13

PRIOR PILING DATE: 2001-09-13

PRIOR PILING DATE: 2001-09-13

PRIOR PILING DATE: 2001-09-13

PRIOR PILING DATE: 2001-09-21

NUMBER OF SEQ ID NOS: 99

LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 11, Application US/10345000
; Publication No. US2004001817731
GENERAL INFORMATION:
APPLICANT: OXXON PHARMACCINES LIMITED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                     TYPE: PRT; ORGANISM: Plasmodium
US-10-360-836-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
US-10-345-000-11
```

g

```
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: MAMIChael, Andrew
APPLICANT: Hill, Adrian V.S.
APPLICANT: Hill, Adrian V.S.
APPLICANT: Hill, Adrian V.S.
APPLICANT: Schneider, Jorg
APPLICANT: Schneider, Jorg
APPLICANT: Plebanski, Magdalena
APPLICANT: Blanchard, Tomas
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Which Generate B CD8 T Cell Immune Response
TITLE OF INVENTION: Which Generate B CO8 T Cell Immune Response
FILE REFERENCE: 2907.100-000
CURRENT FILING DATE: 2004-04-28
PRIOR APPLICATION NUMBER: US/09/454,204
PRIOR APPLICATION NUMBER: BS 00/454,204
PRIOR APPLICATION NUMBER: GB 97 11957.2
PRIOR FILING DATE: 1997-06-09
SEQ ID NO 41
LENGTH: LABS TO A LEAST TO A LEA
                                APPLICANT: Hanke, Tomas
APPLICANT: Smith, Geoffrey L.
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Methods and Reagents for Vaccination
TITLE OF INVENTION: Mitch Generate A CD8 T Cell Immune Response
FILE REFERENCE: 2907.1000-000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
100.0%; Score 48; DB 16; Length 229;
Best Local Similarity 100.0%; Pred. No. 0.33;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 48; DB 16; Length 229; 100.0%; Pred. No. 0.33; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
; OTHER INFORMATION: Complete Epitope of Malaria String
US-10-833-439-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Complete Epitope of Malaria String
US-10-653-624-41
                                                                                                                                                                                                                          CURRENT PAPLICATION NUMBER: US/10/653,624
CURRENT FILING DATE: 2003-09-02
PRIOR APPLICATION NUMBER: US/09/454,204A
PRIOR FILING DATE: 1999-12-09
PRIOR FILING DATE: 1998-06-09
PRIOR FILING DATE: 1998-06-09
PRIOR FILING DATE: 1998-06-09
PRIOR FILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 78
SOFTWARE: FELSEQ for Windows Version 4.0
SCATTANDER: 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 41, Application US/10833439
Publication No. US20040175365A1
GENERAL INFORMATION:
Plebanski, Magdalena
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88 HLGNVKYLV 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         °
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 100.0%; Score 48; DB 14; Length 229; Best Local Similarity 100.0%; Pred. No. 0.33; Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 48; DB 15; Length 20; Best Local Similarity 100.0%; Pred. No. 0.026; Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Complete Epitope of Malaria String US-10-079-167-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Hill, Adrian V.S.
APPLICANT: Hill, Adrian V.S.
APPLICANT: McShane, Helen
APPLICANT: Gilbert, Sarah C.
APPLICANT: Reece, William
APPLICANT: Schneider, Joerg
TITLE OF INVENTION: Vaccination Method
FILE REPERENCE: 2907.1000-001
CURRENT APPLICATION NUMBER: US/10/079.167
CURRENT PILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-12-09
PRIOR PILING DATE: 1999-12-09
PRIOR PILING DATE: 1997-06-09
PRIOR PILING DATE: 1997-06-09
PRIOR PILING DATE: 1997-06-09
PRIOR FILING DATE: 2001-09-13
PRIOR FILING DATE: 2001-09-13
PRIOR FILING DATE: 2001-09-21
NUMBER OF SEQ ID NOS: 99
NUMBER OF SEQ ID NOS: 99
                         FILE REFERENCE: 550-409
CURRENT APPLICATION NUMBER: US/10/345,000
CURRENT FILING DATE: 2003-02-20
.NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin version 3.0
SEQ ID NO 11
LENGTH: 20
TITLE OF INVENTION: VACCINATION METHOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 41, Application US/10079167
Publication No. US20030138454A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 41, Application US/10653624; Publication No. US20040131594A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                          TYPE: PRT ORGANISM: Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: MCMichael, Andrew
APPLICANT: Hill, Adrian V.S.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Schneider, Jorg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88 HLGNVKYLV 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 41
LENGTH: 229
TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                               US-10-345-000-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-653-624-41
```

ö

Gaps

ö

ö

0; Gaps

RESULT 14

Mon Dec 6 15:42:47 2004

상 임

Search completed: December 6, 2004, 15:36:07 Job time : 100 secs

```
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

OM protein - protein search, using sw model

Run on:

December 6, 2004, 15:18:43; Search time 23.5 Seconds (without alignments) 36.849 Million cell updates/sec

US-10-042-202-1 48 1 HLGNVKYLV 9 Title: Perfect score: Sequence: BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 seqs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		æ				
Result		Query				
No.	Score	Match	Length	8	ID	Description
1	48	100.0	559	7	804531	thrombospondin-rel
7	48	100.0	574	7	A46283	te
m	39	81.2	133	0	JC2082	profilin - Europea
4	39	81.2	427	N	C45438	1 ga
S	39	81.2	1006	7	A53933	myosin I myr 4 - r
9	37	77.1	384	~	S63345	hypothetical prote
7	37	77.1	450	N	T25693	
80	36	75.0	131	~	T10769	profilin - Para ru
σ	36	75.0	317	7	T22736	hypothetical prote
10	36	75.0	439	~	T09214	choline monooxygen
11	36	75.0	446	7	T14542	choline monooxygen
12	36	75.0	495	(7)	T27936	hypothetical prote
13	36	75.0	536	7	D83196	
14	36	75.0	2139	0	T18296	myosin heavy chain
15	35	72.9	347	7	D39999	hypothetical prote
16	35	72.9	408	~	T21412	_
17	35	72.9	1017	7	T24349	IA - C
18	35	72.9	2116	~	A26655	myosin heavy chain
19	34	70.8	301	7	S33042	hypothetical prote
	34		348	N	T15219	
21	34	70.8	461	0	H81319	
	34	70.8	260	7	E97776	hypothetical prote
23	34	70.8	260	~	H71702	hypothetical prote
			604	~	S13653	ATP-dependent RNA
25		•	785	~	A29953	alpha-1 proteinase
	34	70.8	2626	7	T31099	myosin-RhoGAP prot
	33	ω.	123	~	2971	guanine-nucleotide
28	33	68.8	162	7	952	phosphopantetheine
53	33	68.8	188	7	S51821	myosin heavy chain

hypothetical prote	dipeptide ABC tran	carbonate dehydrat	hypothetical prote	propionate kinase	oleoy1-[acyl-carri	oleoyl-[acyl-carri	hypothetical prote	probable ABC trans	conserved hypothet	myosin-VIIa motor	probable ATP-depen	hypothetical prote	hypothetical prote	myosin VIIa, short	probable unconvent	
A83906	D64557	CRHU6	T24947	AH0896	A59034	T12583	B96534	B84825	A81682	A59285	S62003	C89940	T32487	A59257	E84726	
7	7	Н	~	7	7	~	7	~	7	~	7	~	~	7	7	
222	285	308	311	402	412	430	494	544	999	266	617	733	843	1203	1490	
68.89	68.89	68.8	8.89	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.89	68.8	
33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	
30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	

ALIGNMENTS

RESU	RESULT 1
S04531	
thro	thrombospondin-related protein TRAP - malaria parasite (Plasmodium falciparum)
N;A1	N;Alternate names: thrombospondin-related anonymous protein
C;Sp	C;Species: Plasmodium falciparum
C;Da	C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-Ju1-2004
C; Ac	C;Accession: S04531
R; Ro	R;Robson, K.J.H.; Hall, J.R.S.; Jennings, M.W.; Harris, T.J.R.; Marsh, K.; Newbold, C.I.,
Natu	Nature 335, 79-82, 1988
A; Ti	A; Title: A highly conserved amino-acid sequence in thrombospondin, properdin and in prote
A;Re	A; Reference number: S04531; MUID:88318952; PMID:3045563
A; AC	A; Accession: S04531
A; Wo	A; Molecule type: DNA
A;Re	A;Residues: 1-559 <rob></rob>
A, Cr	A;Cross-references: UNIPROT:P16893; EMBL:X13022; NID:g9977; PID:g9978
F;24	F;240-287/Domain: thrombospondin type 1 repeat homology <thr1></thr1>
g	Query Match 100.0%; Score 48; DB 2; Length 559;
Be	,
Ma	Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
ò	1 HLGNVKYLV 9
qq	3 HLGNVKYLV 11

Absorozoite surface protein 2 - malaria parasite (Plasmodium falciparum) (strain NF54)
N;Alternate names: thrombospondin-related anonymous protein (TRAP)
S;Specise: Plasmodium falciparum
C;Specise: Plasmodium falciparum
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Accession: A46283
R;Rogers, W.O.; Mallik, A.; Mellouk, S.; Nakamura, K.; Rogers, M.D.; Szarfman, A.; Gordon, A;Rogers, W.O.; Mallik, A.; Mollouk, S.; Nakamura, K.; Rogers, M.D.; Szarfman, A.; Gordon, A;Title: Characterization of Plasmodium falciparum sporozoite surface protein 2.
A;Reference number: A46283, MUID:93028427; PMID:1409621
A;Accession: A46283
A;Accession

Gaps ., 0 Ouery Match
100.0%; Score 40; DB 2; Length 574;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 9; Conservative 0; Mismatches 0; Indels

ö

3 HLGNVKYLV 11 1 HLGNVKYLV 9 셤 ð

Gaps

; 0

Ġ

```
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Cross-references: UNIPROT:002150; EMBL:U97549; PIDN:AABS2849.1; GSPDB:GN00028; CESP:F1:
A;Experimental source: strain Bristol N2; clone F15A8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hypothetical protein YNR015w - yeast (Saccharomyces cerevisiae)
NyAlternate names: hypothetical protein N2065
C;Species: Saccharomyces cerevisiae
C;Species: Saccharomyces cerevisiae
C;Date: 27-Apr-1996 #sequence_revision 03-May-1996 #text_change 09-Jul-2004
C;Accession: S63345; S63343; S63346
R;Duesterhoeft, A.; Flocth, M.; Fritz, C.; Heuss-Neitzel, D.; Hilbert, H.; Moestl, Ribmitted to the Protein Sequence Database, April 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hypochetical protein F15A8.7 - Caenorhabditis elegans C; Species: Caenorhabditis elegans C; Species: Caenorhabditis elegans C; Species: Caenorhabditis elegans C; Species: T25-6ct-1999 #text_change 09-Jul-2004 C; Accession: T25693 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004 submitted to the EMBL Data Library, April 1997 #3. Description: The sequence of C: elegans cosmid F15A8.
                                                                                                      Query Match 81.2%; Score 39; DB 2; Length 1006; Best Local Similarity 66.7%; Pred. No. 17; Matches 6; Conservative 3; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 37; DB 2; Length 384; Pred. No. 15; 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A;Residues: 1-534 *CDDS-
A;Cross-references: UNIPROT: P53720; EMBL: Z71630; MIPS:YNR015w
A;Experimental source: strain $288C
R;Maurer, C.T.C.; Urbanus, J.H.M.; Planta, R.J.
submitted to the Protein Sequence Database, April 1996
A;Reference number: $63266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A,Cross-references: EMBL:Z71630, MIPS:YNR015w
A,Experimental source: strain S288C
R;Pohl, T.M.
submitted to the Protein Sequence Database, April 1996
F;12-682/Domain: myosin motor domain homology <MMOT> F;102-109/Region: nucleotide-binding motif A (P-loop)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Gene: SGD:SNM1
A;Cross-references: SGD:S0005298; MIPS:YNR015w
A;Map position: 14R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A,Accession: S63346
A,Molecule type: DNA
A,Residues: 336-384 <POH>
A,Cross-treferences: EMBL:Z71630; MIPS:YNR015w
A,Experimental source: strain S288C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77.1%;
55.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 55...
5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |:|| ||::
289 HIGNTKYML 297
                                                                                                                                                                                                                                                                                                                                                       276 HLGNLKFIV 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Reference number: S63346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Reference number: S62944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                  1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-58 < MAU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Accession: T25693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Accession: S63343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T25693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 4
(45438

myosin I gamma, MMI gamma - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Species: Mus musculus (house mouse)
C;Date: 22-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 15-Mar-2004
C;Accession: C45438
R;Sherr, E.H.; Joyce, M.P.; Greene, L.A.
J; Cell Biol. 120, 1405-1416, 1993
A;Title: Mammalian myosin I alpha, I beta, and I gamma: new widely expressed genes of th
A;Reference number: A45438; MUID:93194946; PMID:8449986
A;Accession: C4538
                                                                                                          profilin - European white birch
N.Alternate names: actin-binding protein
N.Alternate names: actin-binding protein
CiSpecies: Betula pendula (Buropean white birch)
CiSpecies: Betula pendula (Buropean white birch)
CiAccession: JC2082
Rivalenta, R.; Ball, T.; Vrtala, S.; Duchene, M.; Kraft, D.; Scheiner, O.
Biochem. Biophys. Res. Commun. 199, 106-118, 1994
A;fitle: CDNA cloning and expression of timothy grass (Phleum pratense) pollen profilin
A;Reference number: JC2080; MUID:94168560; PMID:8123000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Accession: JC2082
A;Molecule type: mRNA
A;Rolecule type: mRNA
A;Cross-references: 1-133 <VAL>
A;Cross-references: UNIPROT:P25816
A;Experimental source: pollen
C;Comment: This protein is responsible for cross-reactivities in 20% of pollen and food
C;Superfamily: profilin
C;Keywords: actin binding; cytoskeleton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 5

A53933

myosin I myr 4 - rat

C;Species: Rattus norvegicus (Norway rat)

C;Accession: 1994 #sequence_revision 07-Oct-1994 #text_change 02-Feb-2001

C;Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 02-Feb-2001

C;Accession: A53933

R;Baehler, M; Kroschewski, R.; Stoeffler, H.E.; Behrmann, T.

J. Cell Biol. 126, 375-389, 1994

J. Cell Biol. 126, 375-389, 1994

J. Cell Biol. 126, 375-389, 1994

A;Accession: A53933

A;Accessi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gabs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Rote to preliminary; not compared with conceptual translation A; Molecule type: nucleic acid A; Readues: 1-427 < SHB.
A; Readues: 1-427 < SHB.
A; Note: sequence extracted from NCBI backbone (NCBIP:131912) F;1-427/Domain: myosin motor domain homology (fragment) < MMOT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81.2%; Score 39; DB 2; Length 427; 66.7%; Pred. No. 6.8; 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81.2%; Score 39; DB 2;
66.7%; Pred. No. 2;
:ive 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             O'Lery Match
Best Local Similarity 66.7
Then 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               132 HLGNLKFIV 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ||| :||:|
HLGGIKYMV 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

ö

Gaps

; 0

8 요

```
R'Rathinasabapathi, B.; Burnet, M.; Russell, B.L.; Gage, D.A.; Liao, P.C.; Nye, G.J.; Scr
Proc. Natl. Acad. Sci. U.S.A. 94, 3454-3458, 1997
A;Title: Choline monooxygenase, an unusual iron-sulfur enzyme catalyzing the first step c
A;Reference number: Z16612; MUID:97250559; PMID:9096415
                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: UNIPROT:004121; EMBL:U85780; NID:g1943944; PIDN:AAB52509.1; PID:g194: A;Note: parts of this sequence, including the amino end of the mature protein, were deter
                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Keywords: 2Fe-2S; chloroplast; metalloprotein; oxidoreductase; Rieske iron-sulfur prote F;1-6O/Domain: transit peptide (chloroplast) #status predicted <TRP>F;1-439/Product: choline monoxygenase #status experimental <MAT>F;15-199/Domain: Rieske [2Fe-2S] homology <RRY.
F;152-199/Domain: Rieske [2Fe-2S] homology <RRY.
F;162,164,181,184/Binding site: 2Fe-2S cluster (Cys, His, Cys, His) (covalent) #status p)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Species: Beta vulgaris (beet)
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 09-Jul-2004
C;Accession: T14542
R;Russell, B.L.; Rathinasabapathi, B.; Hanson, A.D.
submitted to the EMBL Data Library, September 1997
A;Description: Osmotic stress induces expression of choline monooxygenase in sugar beet & A;Reference number: Z18128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Residues: 1-446 <RUS>
A;Cross-references: UNIPROT:O22553; EMBL:AF023132; NID:g2522209; PID:g2522210
A;Experimental source: strain Great Western D-2; salinized leaves
A;Note: expression induced by osmotic stress
  holine monooxygenase (BC 1.1.3.-) precursor - spinach
;Species: Spinacia oleracea (spinach)
;Date: 11.-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cispecies: Caenorhabditis elegans
Cispecies: Caenorhabditis elegans
Cispate: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
Ciscoession: T27936
Rileimbach, D.
submitted to the EMBL Data Library, November 1995
A;Description: The sequence of C. elegans cosmid ZK622.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 75.0%; Score 36; DB 2; Length 439; Best Local Similarity 87.5%; Pred. No. 28; Matches 7; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Length 446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-495 <LEI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 36; DB 2
Pred. No. 28;
1; Mismatches
                                                                                                                                                                                                                                                                              A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-439 <RAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 75.0%;
87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 75.0
Best Local Similarity 87.5
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hypothetical protein ZK622.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              choline monooxygenase - beet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ||||:|||
147 LGNVEYLV 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140 ĽĠŇVEYĽV 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Keywords: monooxygenase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 LGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 LGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Accession: T27936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Accession: T14542
                                                                                                                                                                                                                                                         A; Accession: T09214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        127936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Residues: 1-317 <WIL>
A;Cross-references: UNIPROT:Q9XUY5; EMBL:Z81550; PIDN:CAB04477.1; GSPDB:GN00028; CESP:F5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RiAgiurias, J.A.; Arilla, M.C.; Gomez-Bayon, N.; Martinez, J.; Martinez, A.; Palacios, submitted to the EMBL Data Library, October 1997
A; Description: Cloning and expression of profilin allergen from Hevea brasiliensis.
A; Reference number: 217130
A; Accession: T10769
                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                               cofilin - Para rubber tree
Species: Hevea brasiliensis (Para rubber tree)
Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Species: Caenorhabditis elegans
Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 36; DB 2; Length 317;
Pred. No. 20;
1; Mismatches 1; Indels
                                                                                                                                    Score 37; DB 2; Length 450;
Pred. No. 18;
3; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                          A;Gene: CESP:F15A8.7
A;Map position: X
A;Introns: 30/3; 80/3; 140/2; 172/1; 250/3; 285/3; 375/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein F55F3.3 - Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Introns: 13/3; 47/1; 94/1; 185/3; 228/3; 264/3
C; Superfamily: Na+/K+-transporting ATPase beta chain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Status: preliminary; translated from GB/EMBL/DDBJA;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75.0%; Score 36; DB 2; 66.7%; Pred. No. 7.9; iive 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Steward, C. submil Data Library, November 1996 submitted to the EMBL Data Library, November 1996 A;Reference number: 219607 A;Accession: T22736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Cross-references: UNIPROT: 065812; EMBL: Y15042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Experimental source: cv. RRIC 133; pollen C; Superfamily: profilin C; Keywords: actic Lilin C; Keywords:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Superfamily: profilin
Keywords: actin binding; cytoskeleton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Experimental source: clone F55F3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75.0%;
                                                                                                                                    Query Match
Best Local Similarity 66.7%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 66.7°,
6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 75.0
Matches 6; Conservative
                                                                                                                                                                                                                                                                                    |:|:|:||
240 HIGDVEYLV 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||| ||:|
66 HLGGTKYMV 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ||| ||||
235 HLGKVKYI 242
                                                                                                                                                                                                                                                   1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HLGNVKYL 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-131 <AST>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gene: CESP:F55F3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Accession: T10769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Accession: T22736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Map position: X
C;Genetics:
```

ð g ö

Part A con the same

RESULT 10

Š 셤

Gaps .; 0

```
Silusher, M.B.; Gregory, J.; Storey, C.C.; Richmond, S.J.

Submitted to the EMBL Data Library, October 1991

A;Description: Analysis of the complete nucleotide sequence of the plasmid pCpAl isolated
A;Reference number: $18141

A;Reference number: $18145

A;Retus: preliminary

A;Molecule type: DNA

A;Residues: 1-347 <LUS>

A;Residues: 1-347 <LUS>

A;Residues: 1-347 <LUS>

A;Cross-references: UNIPROT:Q46260; EMBL:X62475; NID:g40608; PIDN:CAA44336.1; PID:g40613
                                                                        ypothetical protein 4 - Chlamydophila psittaci
;Species: Chlamydophila psittaci, Chlamydia psittaci
;Date: 08-Nov-1991 #sequence_revision 08-Nov-1991 #text_change 09-Jul-2004
;Accession: S18145; D39999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 72.9%; Score 35; DB 2; Length 347; Best Local Similarity 66.7%; Pred. No. 35; Matches 6; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6, 2004, 15:31:09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Search completed: December Job time: 25.5 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              134 HLGNEPYLI 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Species: Pseudomonas aeruginosa
C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 16-Aug-2004
C;Accession: D83196
R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, M.J.; Br
adman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.; Lim,
.; Lory, S.; Olson, M.V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Title: Complete genome sequence of Pseudomonas aeruginosa PA01, an opportunistic pathd
A;Reference number: A82950; MUID:20437337; PMID:10984043
A;Accession: D83196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-2139 <GUI>
A;Cross-references: UNIPROT:Q07569; EMBL:L03534; NID:g1850912; PID:g1850913; PIDN:AAB480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPROT:Q9HY24; GB:AE004780; GB:AE004091; NID:g9949749; PIDN:AAG0699
A;Experimental source: strain PAO1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       conserved hypothetical protein PA3602 [imported] - Pseudomonas aeruginosa (strain PAO1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                            ö
A,Cross-references: UNIPROT:Q23552; EMBL:U39998; PIDN:AAA81102.1; CESP:ZK622.3 C;Genetics: CSSP:XK622.3 A;Gene: CESP:XK622.3 A;Gene: CESP:XK622.3 A;Introns: 34/2; 97/2; 222/3; 310/3 C;Superfamily: Caenorhabditis elegans hypothetical protein ZK622.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      myosin heavy chain - Entamoeba histolytica
C;Species: Entamoeba histolytica
C;Species: Entamoeba histolytica
C;Accession: T18296 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
R;Guillen, N. Bub. Data Library, February 1997
A;Reference number: Z18865
A;Reference number: Z18865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          °
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             75.0%; Score 36; DB 2; Length 2139;
85.7%; Pred. No. 1.4e+02;
.ive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       h Similarity 75.0%; Score 36; DB 2; Length 536; Similarity 75.0%; Pred. No. 34; 6; Conservative 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Gene: mhcA C; Superfamily: myosin motor domain homology E; 91-780/ Domain: myosin motor domain homology <a href="MMO">MMO</a>
                                                                                                                                                                               Length 495;
                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Superfamily: Glutamate synthase, large subunit domain 2
                                                                                                                                                                            75.0%; Score 36; DB 2; 66.7%; Pred. No. 32; tive 1; Mismatches
                                                                                                                                                                               Query Match 75.0
Best Local Similarity 66.7
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6; Conservative
                                                                                                                                                                                                                                                                                                                                          129 HLGNINYQV 137
                                                                                                                                                                                                                                                                                                  1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |||::|||
64 LGNIRYLV 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363 HLGNVEY 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 LGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 HLGNVKY 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: DNA
A;Residues: 1-536 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Genetics:
A;Gene: PA3602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
T18296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                     ð
```

```
Trap protein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 HLGNVKYLV
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAE46495
CAE46495;
                                                                                                                                                                                                                                                                                                                                                                                              Q70GK0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
CAE46495
ID AC CAE46
AC CAE46
DT 02-M
                                                                                                                                                                                                                                                                                                                                                           RESULT 1
 \frac{3}{2}
                                                                                                                                                                                                                                                                                                                                                                            70GK0
                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q70gk0 plasmodium
Cae46495 plasmodium
Cae46499 plasmodium
Cae46499 plasmodium
Q70gj3 plasmodium
Q70gj3 plasmodium
Q70gj3 plasmodium
Q70gj4 plasmodium
Q70gk2 plasmodium
Q70gk2 plasmodium
Q70gk2 plasmodium
Cae4649 plasmodium
C7611 plasmodium
O7611 plasmodium
O1508 plasmodium
O1508 plasmodium
O7176 plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                          December 6, 2004, 15:17:52 ; Search time 125.5 Seconds (without alignments) 41.262 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Description
                                                                                                                                                                                                                                                                                                                                                                              1825181
                 GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                       1825181 segs, 575374646 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAE46495
Q70GJ7
Q70GG3
Q70GG3
Q70GJ8
Q70GJ9
Q70GK2
Q70GK2
Q70GK3
Q70GK2
CAE46492
CAE46496
CAE46496
CAE46496
CAE46496
CAE46496
CAE46496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                         OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                076118
001502
001503
001506
001508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q01509
Q717T6
Q717T7
                                                                                                                                                                                                                                                                                                  Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            270GK0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                UniProt_02:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query
Match Length DB
                                                                                                                                                                                                        US-10-042-202-1
                                                                                                                                                                                                                                          1 HLGNVKYLV 9
                                   Copyright
                                                                                                                                                                                                                                                                                 BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .001
                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                          Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                              Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3303876588321098765883088769830
                                                                                                                                                                                                        Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Result
```

```
ö
                                                          plasmodium
plasmodium
plasmodium
plasmodium
plasmodium
plasmodium
plasmodium
plasmodium
                                    plasmodium
plasmodium
  plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                        09tyc1
09tyc3
09tyc3
09tyc4
09tyc6
09tyc6
09tyc8
09tyd0
09tyd1
09tyd1
09tyd1
             Q717u0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Plasmodium falciparum.
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                            Name-trap;
Plasmodium falciparum.
Eukaryota, Alveolata; Apicomplexa, Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                 Mamillapalli A., Joshi H., Malhotra P.;
Mamillapalli A., Joshi H., Malhotra P.;
Submitted (Aug-2003) to the EMBL/GenBank/DDBJ databases.
SMBL; AJS81768; CAE46495.1; -.
InterPro; IPR000884; TSP1.
InterPro; IPR00095; VWF A.
Pfam; PF00090; TSP_1; 1.
Pfam; PF00092; VWA; 1.
Pfam; PF00453; VWPADOMAIN.
SWART; SM00209; TSP1; 1.
SWART; SM00209; TSP1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02A0030CC5EDCA93 CRC64;
                                                                                                                                                                                                                                                                                        Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-WAR-2004 (TrEMBLrel. 27, Created)
02-WAR-2004 (TrEMBLrel. 27, Last sequence update)
02-WAR-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                323 AA
                                                                                                                                                                                                                                                     323 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 48; DB
100.0%; Pred. No. 0.4
tive 0; Mismatches
                                                                                                                                                                                            ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     [1] —
SEQUENCE FROM N.A.
STRAIN-BM3-62;
Mamillapalli A., Joshi H., Malhotra P.;
                                                                                                                                                                                                                                                                             Created)
Q717T9
Q717U0
Q9TYC1
Q9TYC2
Q9TYC3
Q9TYC4
Q9TYC6
Q9TYC6
Q9TYC8
Q9TYC8
Q9TYC9
Q9TYC9
                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                         09GTW7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323 AA; 36608 MW;
                                                                                                                                                                                                                                                              Q70GK0;
05-JUL-2004 (TrEMBLrel. 27,
05-JUL-2004 (TrEMBLrel. 27,
05-JUL-2004 (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.00
Best 2.00 9; Conservative
  00000000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE; PS50092; TSP1; 1.
PROSITE; PS50234; VWFA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                     PRELIMINARY;
  Trap protein (Fragment)
```

```
PRINTS; PR00453; VWFADOMAIN
                                                                                                                                                                                                                                                                                                                                                          3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                 1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q70GJ8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q70GE3
                                                                                                                                                                                               Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q70GJ8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ,0GE3
        SETE
                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SO DR REP DE LA PACE OR PACE O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DER REPORT OF THE PROPERTY OF 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-DK3-16;
Mamillapalli A., Joshi H., Malhotra P.;
Marillapalli A., Joshi H.cerminal region of Plasmodium falciparum in
Indian isolates.";
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
"Polymorphism in TRAP-N terminal region of Plasmodium falciparum in
                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Plasmodium falciparum.
Eukaryota, Alveolata, Apicomplexa, Haemosporida, Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name-frap;
Plasmodium falciparum.
Bukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NNBL_TaxID=5833;
                                                                                                                                                                                                                                                                     Ouery Match 100.0%; Score 48; DB 2; Length 323; Best Local Similarity 100.0%; Pred. No. 0.43; Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 48; DB 2; Length 327; 100.0%; Pred. No. 0.44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
Mamillapalli A., Joshi H., Malhotra P.;
Submitted (ANG-2046) to the EMBL/GenBank/DDBJ databases.
EMBL; AJS4171; CAR4648.1; -.
InterPro; IPR000884; TSP1.
InterPro; IPR002035; WF-A.
Pfam; PF00092; TSP 1.
                                    Indian isolates.";
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ581768; CAR4495.1; -.
                                                                                                                                                                                           323 AA; 36608 MW; 02A0030CC5EDCA93 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               327 AA; 37251 MW; 881D7A4B4EDD235A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-JUL-2004 (TrEMBLrel. 27, Last sequence update) 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 327 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     327 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Pred. nc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRINTS; PR00453; VWFADOMAIN.
SMART; SM00209; TSP1; 1.
SMART; SM00207; VWB; 1.
PROSITE; PS50092; TSP1; 1.
PROSITE; PS50234; VWFA; 1.
NON TER 327 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAE46498 PRELIMINARY;
CAE46498;
02-MAR-2004 (TEMBLEEL 27,
02-MAR-2004 (TEMBLEEL 27,
02-MAR-2004 (TEMBLEEL 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q70GJ7;
05-JUL-2004 (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Trap protein (Fragment). TRAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Trap protein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q70GJ7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 3
070GJ7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
CAE46498
ID CAE4
AC CAE4
AC CAE4
DT 02-N
DT 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                          Gaps
                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Plasmodium falciparum.
Eukaryota, Alveolata, Apicomplexa, Haemosporida, Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Plasmodium falciparum.
Eukaryota, Alveolata, Apicomplexa, Haemosporida, Plasmodium.
NCBI_TaxID=5833;
                                                                                           Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 48; DB 2; Length 331; 100.0%; Pred. No. 0.44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mamillapalli A., Joshi H., Malhotra P.;
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
EMBL, AJ581770; CAE46497.1;
InterPro; IPR0020884; TSP1.
InterPro; IPR002035; VWF.A.
Pfam; PF00090; TSP I;
Pfam; PF00092; VWA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mamillapalli A., Joshi H., Malhotra P.;
Submitted (SEP-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ582081; CAE46626.1; -
InterPro; IPR002084; TSP1.
InterPro; IPR002035; VWF.A.
Pfam; PF00090; TSP I; 1.
Pfam; PF00092; VWA; 1
EMBL; AJ581771; CAE46498.1; -.
NON TER 327 327
SEQÜENCE 327 AA; 37251 MW; 881D7A4B4EDD235A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           331 331 331 331 AA; 37559 MW; B1BFCC83B8BD4D25 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                           100.0%; Score 48; DB 2;
100.0%; Pred. No. 0.44;
ative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              331 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Trombospondin-related protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                      05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last seq
05-JUL-2004 (TrEMBLrel. 27, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS; PR00453; VWFADOMAIN.
SMART; SM00209; TSP1; 1.
SMART; SM00327; VWA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS50092; TSP1; 1.
PROSITE; PS50234; VWFA; 1.
NON TER 331 331
SEQUENCE 331 AA; 37559 N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
                                                                                                              Local Similarity 100
                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Trap protein (Fragment)
```

```
Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Trap protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q70GK2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q70GK3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q70GK3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q70GK2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q70GK3
          STREETS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ARA SOC GENERAL BENERAL BENERA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plasmodium falciparum.
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBL_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Plasmodium falciparum.
Eukaryotain Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 48; DB 2; Length 331; Best Local Similarity 100.0%; Pred. No. 0.44; Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mamillapalii A. Joshi H., Malhotra P.;
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
Burls, Asilvey; Care4496.1; -.
EMBL; Asilvey; PRO02035; VWF_A.
Fram; PRO00090; TSP1.
InterPro; IPR002035; VWF_A.
Pfam; PR00090; TSP1.1.
PRINTS; PR00453; VWRADOMAIN.
SMART; SM00209; TSP1: 1.
PROSITE; PSS00237; VWA; 1.
PROSITE; PSS00237; VWA; 1.
PROSITE; PSS00237; VWA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 48; DB 2; Length 331; 100.0%; Pred. No. 0.44; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mamillapalli A., Joshi H., Malhotra P.;
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
EMBL, AJS81767; CAE46494.1; -.
InterPro; IPR00884; TSP1.
InterPro; IPR002035; VWF_A.
                                                                                                                                                                                                  NON TER 331 331
SEQUENCE 331 AA; 37521 MW; CBD1823A0C8C49EB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  331 AA; 37573 MW; 60EBBAC3FDD9C779 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Trap protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       331 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         331 AA
SMART; SM00209; TSP1; 1.
SMART; SM00327; VWA; 1.
PROSITE; PS50092; TSP1; 1.
PROSITE; PS50234; VWFA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.
Les 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Trap protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q70GJ9;
Q70GJ9;
05-JUL-2004 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q70GK1
Q70GK1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7

1070649

1070649

AC 07064

BOT 05-41

BOT 05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q70GK1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ID DTT NAME OF THE POT OT THE POT OF THE POT OF THE POT OF THE POT OT THE POT OT THE POT
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapa
                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Plasmodium falciparum.
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Name=trap;
Jasmodium falciparum.
Bukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                           DB 2; Length 331;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 331;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 48; DB 2; Length 33
100.0%; Pred. No. 0.44;
:ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
Mamillapalli A., Joshi H., Malhotra P.;
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
EMBL, AJS81765; CAR46493.1;
InterPro; IPR000884; TSP1.
InterPro; IPR000355; WWF.A.
Pfam; PF00092; VWA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
Mamillapalli A., Joshi H., Malhotra P.;
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
Pfam; PF00090; TSP 1; 1.
Pfam; PF00092; VWA; 1.
PRINTS, PR00433; VWFADOMAIN.
SMART; SM00327; VWA; 1.
SMART; SS0092; TSP1; 1.
PROSITE; PS50092; TSP1; 1.
PROSITE; PS50234; VWFA; 1.
NON TER 331 331
SEQÜENCE 331 AA; 37601 MW; 39EBBACF0DD9C77C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               331 AA; 37609 MW; 2FE4EB47F1963D76 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   070GK2;
05-JJL-2004 (TrEMBLrel. 27, Created)
05-JJL-2004 (TrEMBLrel. 27, Last sequence update)
05-JJL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    %;0.cd.;
05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Name=trap;
                                                                                                                                                                                                                                100.0%; Score 48; DB 2; 100.0%; Pred. No. 0.44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                331 AA
                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRINTS; PR00453; VWFADOMAIN.
SMART; SM00209; TSP1; 1.
SMART; SM00327; VWA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS50092; TSP1; 1. PROSITE; PS50234; VWFA; 1. NON TER 331 331 SEQUENCE 331 AA; 37609 N
```

```
Gaps
                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=MP3-4;

Mamillapalli A., Joshi H., Malhotra P.;

Mamillapalli A., Joshi H., Malhotra P.;

Manillapalli A., Joshi H., Malhotra P.;

Midian isolates.";

Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.

EMBL, AJSB1769; CARG46496.1;

SEQÜENCE 331 AA; 37573 MW; 60BBBAC3FDD9C779 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=BK3-17;
Mamillapalli A., Joshi H., Malhotra P.;
Mamillapalli A., Joshi H., Malhotra P.;
Molina isolates.";
Submitted (Ang-2003) to the EMBL/GenBank/DDBJ databases.
EMBL, AJ581767; CAE46494.1;
NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.0%; Pred. No. 0.44;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Plasmodium falciparum.
Bukaryota, Alveolata, Apicomplexa, Haemosporida, Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.0%; Pred. No. 0.44;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                            Length 331;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON TER 331 331
SEQÜENCE 331 AA, 37601 MW, 39EBBACFODD9C77C CRC64;
                                              331 331 330 MW; 2FB4EB47F1963D76 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-MAR-2004 (TrEMBLrel. 27, Created)
02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAE46496 PRELIMINARY; PRT; 331 AA.
CAE46496;
CAE46496;
02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
                                                                                                                                                        Query Match 100.0%; Score 48; DB 2; Best Local Similarity 100.0%; Pred. No. 0.44; Matches 9; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     331 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
EMBL, AJS81765; CAE46493.1; -. NON TER 331 331 SEQUENCE 331 AA; 37609 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Trap protein (Fragment).
TRAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Trap protein (Fragment)
TRAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                  1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAE46494;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAE46494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAE46496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAE46494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DDT ACC OCK RELEASE SO DE RELEASE SO DE RELEASE RELEAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                     STR
                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-RM3-51;
Mamillapalli A., Joshi H., Malhotra P.;
Mamillapalli A., Joshi H., Malhotra P.;
Mamillapalli A., Joshi H., Malhotra P.;
Indian isolates...;
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ581764; CAE46492.1; -..
NON TER 331
SEQÜENCE 331 AA; 37625 MW; 4258443729D48835 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=RM3-21;
Mamillapalli A., Joshi H., Malhotra P.;
"Polymorphism in TRAP-N terminal region of Plasmodium falciparum in Indian isolates ";
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCDI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBL_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           / Match 100.0%; Score 48; DB 2; Length 331; Local Similarity 100.0%; Pred. No. 0.44; nes 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 48; DB 2; Length 331; 100.0%; Pred. No. 0.44; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 331 AA; 37625 MW; 4258443729D48835 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAE46492;
02-MAR-2004 (TrEMBLrel. 27, Created)
02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
Trap protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 331 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      331 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
            EMBL; AJ581764; CAE46492.1; -.
InterPro; IPR000884; TSP1.
InterPro; IPR002025; VWP A.
Pfam; PF000090; TSP 1; 1.
Pfam; PF00092; VWA; 1.
PRINTS; PR00453; VWFADOMAIN.
SMART; SM00209; TSP1; 1.
PROSITE; PS0092; TSP1; 1.
PROSITE; PS02092; TSP1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAE46493;
CAE46493;
02-MAR-2004 (TEMBLEEL: 27,
02-MAR-2004 (TEMBLEEL: 27,
02-MAR-2004 (TEMBLEEL: 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Trap protein (Fragment).
TRAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                               NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAE46492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
CAE46493
ID CAE46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAE46492
IID CAE46
AC CAE46
DT C2-W
DT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S F T D R R D R R D R R D R R D R R D R R D R R D R R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

ö

3 HLGNVKYLV 11

셤

```
RESULT 15
CAE46497
ID CAE46497
```

Search completed: December 6, 2004, 15:30:15 Job time : 126.5 secs

8 %

OLIN WANTE BENG SIH!

GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd. Copyright

OM protein - protein search, using sw model

Run on:

December 6, 2004, 15:14:37 ; Search time 119 Seconds (without alignments) 27.131 Million cell updates/sec

US-10-042-202-1 48 Perfect score:

1 HLGNVKYLV 9 Sequence: BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

2002273 seqs, 358729299 residues Searched:

2002273 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

A Geneseq 23Sep04:* Database :

geneseqp1980s: *
geneseqp2000s: *
geneseqp2000s: *
geneseqp2001s: *
geneseqp2001s: *
geneseqp2003s: *
geneseqp2003bs: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		di			SUMMAKIES	
Result No.	Score	Query Match	Query Match Length	DB	QI	ription
, ,	48	100.0	6	2	AAR87267	Aar87267 Plasmodiu
7	48	100.0	6	0	AAY10523	Aay10523 HLA Class
٣	48	100.0	6	~	AAY03670	Aay03670 Amino aci
4	48	100.0	6	ស	ABG80206	9
S	48	100.0	6	8	ADK69145	Adk69145 Epitope l
9	48	100.0	6	8	ADQ10943	
7	48	100.0	15	7	ADE79950	Ade79950 Plasmodiu
80	48	100.0	20	2	AA017442	
6	48	100.0	229	7	AAY03681	Aay03681 Amino aci
10	48	100.0	559	~	AAR05427	Aar05427 Circumspo
11	40	83.3	15	~	AAW85142	Aaw85142 Helper T-
12	39	81.2	123	4	ABM00029	Abm00029 Allergen
13	39	81.2	133	0	AAR22261	Aar22261 P14 aller
14	39	81.2	133	~	AAR71926	Aar71926 Birch pol
15	39	81.2	133	~	AAY25650	Aay25650 Betula sp
16	39	81.2	133	9	AAE31498	Aae31498 Birch tre
17	39	81.2	133	7	ADC34899	Adc34899 Tree alle
18	38	79.2	753	4	AAM79139	Aam79139 Human pro
19	38	79.2	764	4	AAM80123	Aam80123 Human pro
20	38	79.2	1006	9	ABP98831	
21	38	79.2	1006	7	ADJ95090	Adj95090 Novel NOV
22	37	77.1	131	9	AAE31507	Aae31507 Latex Hev
23	37	77.1	157	4	AAG72436	Aag72436 Human OR-
24	37	77.1	157	4	AAG72246	Aag72246 Human olf
25	37	77.1	265	9	ADA36329	Ada36329 Acinetoba

Abj04042 Human G-p Adh30958 Human G-p Aag71620 Human olf Aae31518 Pear Pyr	Latex Latex Latex Latex		Aae31511 Olive tre Aae31513 Olive tre Abm00025 Allergen Adj49584 Oil-assoc	Aag62633 C album c Aag66535 C album c Abg70944 C. Album Abg70942 C. Album
ABJ04042 ADH30958 AAG71620 AAE31518	AAE31504 AAE31509 AAE31506 AAE31506	AAW78445 AAW78446 AAW78440 AAE31512	AAE31511 AAE31513 ABM00025 ADJ49584	AAG62633 AAG62635 ABG70944 ABG70942
70 00 4 40	• • • •	0000	0 4 4 8	4 4 ሺ ሺ
312 312 338 131		134 134 134	134 134 260 432	444444 44444 444444 444444444444444444
77.1	75.0	75.0 75.0 75.0	75.0 75.0 75.0	75.0 75.0 75.0
37 37 36	36 98	36 36 36 36	36 36 36 36	36 36 36
22 2 2 2 3 4 6 4 6 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6	33 H O H	8 8 8 8 8 4 7 8 9 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	8 8 8 4 4 8 6 0 H	4 4 4 4 2 6 4 3

ALIGNMENTS

Thrombospondin-related anonymous protein; human leucocyte antigen; HLA; class 1; HLA-A2; epitope; malaria; vaccine; CTL induction; cytotoxic T lymphocyte; TRAP. Plasmodium falciparum peptide(s) - useful in vaccine compositions for immunising against malaria. Ξ Aidoo M, Allsopp CEM, Lalvani A, Plebanski Plasmodium falciparum HLA-A2 epitope tr26. AAR87267 standard; peptide; 9 AA Claim 1; Page 18; 23pp; English. 94GB-00006492. 95WO-GB000737. (ISIS-) ISIS INNOVATION LTD (first entry) Plasmodium falciparum. WPI; 1995-358584/46. WO9526982-A2. 31-MAR-1995; 31-MAR-1994; 16-MAY-1996 12-OCT-1995. Whittle HC; Hill AVS, AAR87267; RESULT 1 AAR87267

Two Gambian individuals showed CTL responses to HLA-A2 peptides tr26, tr29 and tr39 (AAR87267-R87269) derived from Plasmodium falciparum thrombospondin-related anonymous protein (TRAP). All three of these peptides bound to HLA-A2 in an assembly assay. Peptide tr39 was identified as the HLA-A2-restricted epitope. The peptides (and analogues and variants of them) are useful in vaccines against malaria

Sequence 9 AA;

0; Gaps 100.0%; Score 48; DB 2; Length 9; 100.0%; Pred. No. 1.7e+06; ive 0; Mismatches 0; Indels Query Match
Best Local Similarity 100.
Matches 9; Conservative

AAY03670 standard; peptide; 9 AA.

ઠે

```
AAY03670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a method of inducing and/or sustaining an immunological cytotoxic T lymphocyte (CTL) response in a mammal. The method comprises: (a) delivering an antigen to the mammal at a level to induce an immunological CTL response in the mammal; and (b) maintaining the level of the antigen in the mammal's lymphatic system to maintaining immunologic CTL response. The method can be used for the delivery of e.g. adifferentiation antigen, a tumour-specific multilineage antigen, an embryonic antigen, an oncogene antigen, a mutated tumour-suppressor gene antigen, or a viral antigen. They can be used for the treatment of alsease such as cancer, e.g. malignant metalanoma or infectious disease, e.g. viral disease such as hepatitis or AIDS. Sustained antigen delivery to the lymphatic system provides for potent CTL stimulation that takes blace in the milieu of the lymphoid organ, and it sustains stimulation that takes blace in the milieu of the lymphoid organ, and it sustains stimulation that takes blace in the milieu of the lymphoid organ, and it sustains stimulation that takes are the lymphatic system provides for potent control organ, and it sustains stimulation that takes bear the lymphatic system provides for potent control organ, and it sustains stimulation that takes bear and the milieu of the lymphatic system provides for the lymphatic system provides for potent control organ states and the milieus of the lymphatic system provides for potent control organ states and the milieus of the lymphatic system provides for potent control organ states and the milieus of the lymphatic system provides for potent control organ states and the milieus of the lymphatic system provides for potent control organ states and the system provides for potent control organ states and the system provides for potent control organ states and the system provides for potent control organ states and the system provides for potent control organ states and the system provides for potent control organ states and system provide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              that is necessary to keep CTL active, cytotoxic and recirculating through the body. AAY10071 to AAY10639 represent examples of peptide antigens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inducing a cytotoxic T lymphocyte response - by maintaining a level of antigen in the lymphatic system of a mammal so as to provide a sustained CTL response, used to treat, e.g. AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cytotoxic T-lymphocyte response; CTL; antigen; lymphatic system; immunisation; tumour; infectious disease; immunotherapy; cancer; malignant melanoma; viral disease; hepatitis; AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 48; DB 2; Length 9; 100.0%; Pred. No. 1.7e+06; rive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                HLA Class I motif peptide SEQ ID NO:453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 44; 199pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CTLI-) CTL IMMUNOTHERAPIES CORP.
                                                                                                                                                                                                                                        AAY10523 standard; peptide; 9 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           given in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97CA-02209815.
97US-00988320.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98WO-US014289
                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kuendig TM, Simard JJL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
Plasmodium falciparum.
                                                                                     HĽĠNVKÝĽV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-120514/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 9 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 409902183-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-JUL-1997;
10-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                         12-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-JAN-1999,
                                                                                                                                                                                                                                                                                                  AAY10523;
                                       н
```

```
The invention relates to mentions and research to generating a procedure of the invention reagonse against at least one target antigen. The kits of the invention comprises (i) as priming composition, a source of one or more CD8+ T-cell (cytotoxic T lymphocytes+(CTL)) epitopes of the target antigen, plus a carrier and (ii) se boosting composition a source of CTL epitopes, with at least one CTL epitope the same as used in (i), with this source being a non-replicating or replication-impaired recombinant poxvirus vector (PVV) plus a carrier. If the source of CTL epitopes in (i) is a viral vector, then the vector in (ii) is from a different virus. The kits are used to generate an immune response (prophylactic or therapeutic) against pathogens or tumours, specifically against malaria carrier parasites such as P. falciparum, or HNV, and also many other bacterial, viral or parasitic pathogens. The kits are also used for protectival, wherever a strong CD8+ response is protective. The boosting composition may be used alone to boost a naturally primed response against malaria. The specifically against malaria. The specifically against malaria composition may be used alone to boost a naturally primed response against malaria. The specifical speci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                    CD8+ T-cell; immune response; antigen; priming composition; CTL; epitope; cytocoxic T lymphocyte; boosting; poxvirus vector; PVV; pathogen; tumour; malaria; parasite; P. falciparum; viral; bacterial; parasitic; cancer; melanoma; HIV; breast; colon; vaccination.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to methods and reagents for generating a protective
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Generating CD8-positive T cell response to target antigen using recombinant poxvirus - for treating or preventing malaria and HIV infection, also epitope strings from Plasmodium and HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AVS, Gilbert SC, Schneider J, Plebanski M;
Blanchard T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                          Amino acid sequence of the malaria (M) string CTL epitope Tr26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 48; DB 2; Length 9; 100.0%; Pred. No. 1.7e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 38; Page 19; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97GB-00011957.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-GB001681.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS INNOVATION LTD.
                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hill AVS,
                                                                                                                                                                                                                                                                                                                            Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mcmichael AJ, Hill
Hanke T, Smith GL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-070325/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 HLGNVKYLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HLGNVKYLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 9; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; AAX29210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 9 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                              WO9856919-A2
                                                                                               07-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                              17-DEC-1998.
                                             AAY03670;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
```

RESULT 4 ABG80206

ö

Gaps

ö

9; Conservative

Matches

1 HLGNVKYLV 9

HLGNVKYLV

RESULT 3

```
The invention relates to a method of inducing and/or sustaining an immunological cytocoxic T lymphocyte (CTL) response in a mammal comprising administering directly to the lymphatic system of the mammal:

(a) an antigen in the form of a polypeptide; (b) a vector comprising a nucleic acid encoding the antigen; or (c) a non-peptide antigen. The certor is useful for inducing and/or sustaining CTL response in a mammal. This is particularly useful for treating a mammal having a malignant tumour (e.g. carcinoma, melanoma, leukaemia or lymphoma) or infectious disease (e.g. hepatitis, acquired immune deficiency syndrome (AIDS), malaria, measles or tuberculosis), or in an animal having a predisposition to these diseases. The mammal may be dogs, cats, mice, cattle, sheep, pigs, goate, rabbits, or in an animal having a predisposition to these diseases. The mammal may be dogs, cats, mice, cattle, sheep, pigs, goate, rabbits, or in steerably humans. ABG79753-ABG80319 represent viral epitopes on major histocompatibility complex (MMC) class I molecules, used in the method of the invention. (Updated on 29-AUG-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                    Major histocompatibility complex; MHC; MHC class I molecule; virus; epitope; cytotoxic T lymphocyte response; CTL response; lymphatic system; antigen; immunogenic; malignant tumour; carcinoma; malanoma; leukaemia; lymphoma; infectious disease; hepatitis; malaria; measles; tuberculosis; acquired immune deficiency syndrome; AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Inducing or sustaining immunological cytotoxic T lymphocyte response in a mammal, useful for treating a mammal with malignant tumor or infectious disease, by directly administering an antigen to the lymphatic system of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 48; DB 5; Length 9; 100.0%; Pred. No. 1.7e+06; ive 0; Mismatches 0; Indels
                                                                                                                                      WHC class I molecule, viral epitope #454.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 37; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CTLI-) CTL IMMUNOTHERAPIES CORP.
ABG80206 standard; peptide; 9 AA
                                                                                                                                                                                                                                                                                                                                                                                                               22-JAN-2002; 2002WO-US002033
                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-FEB-2001; 2001US-00776232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Guet Local Similarity 100.00
Best Local Similarity 100.00
                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Simard JJL;
                                                                               (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-657506/70.
                                                                                                                                                                                                                                                                                                                                   WO200262368-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 9 AA;
                                                                           29-AUG-2003
15-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                          15-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ŧ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the mammal
                                                                                                                                                                                                                                                                                               Viruses.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kundig
  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
```

ADK69145 standard; peptide; 9 AA.

RESULT 5 ADK69145 (first entry)

06-MAY-2004

ADK69145;

BXXXXXX

```
contacting the substrate branch including the steps or ldentifying an epitope of interest; providing substrate polypeptide sequence including the epitope, wherein the substrate permits processing by a processome; contacting the substrate with a composition including the proteasome; and assaying for liberation of epitope. The invention may be useful for the development of compounds with a cytostatic, antibacterial, continuous of tunishing an eventual set of the development of compounds with a cytostatic, antibacterial, continuous of tunishing a polypeptide suitable for epitope liberation, is useful for identifying a polypeptide suitable for epitope liberation, set is useful for identifying a polypeptide suitable for epitope liberation, the invention may allow development of a vaccine. The invention is useful for identified housekeeping epitope. The compositions comprising the identified housekeeping epitopes are useful in vitro in vaccine development or in the generation or expansion of cytotoxic T lymphocyte (CTL) to be used in adoptive immunotherapy. The invention is also useful for inthe knowledge that such epitopes are, in fact, produced by the virus, bacterium, protoxoan or fungus. CTL epitopes are identified based on the knowledge that such epitopes are, in fact, produced by the conthe knowledge that such epitopes are, in fact, produced by the conthe sused to successfully immunise or induce therapeutic cTL responses against housekeeping proteasome expressing target cells in the new transferred to the present equence is that of a peptide which is related to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                     epitope liberation; substrate; proteasome; cytostatic; antibacterial; proteozoaide; fungicide; T-cell activator; vaccine; housekeeping epitope; cytotoxic T lymphocyte; CTL; adoptive immunchlerapy; neoplastic cell; virus; bacterium; protozoan; fungus; housekeeping proteasome system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Identifying polypeptide suitable for epitope e.g., housekeeping epitope, liberation by contacting substrate polypeptide comprising epitope of interest, with proteasome, and assaying for liberation of epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention relates to a novel method of identifying a polypeptide suitable for epitope liberation, including the steps of identifying a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 48; DB 8; I 100.0%; Pred. No. 1.7e+06;
Epitope liberation-related peptide SeqID508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 508; 67pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lei X;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qiu Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADQ10943 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
                                                                                                                                                                                                                                                                                         37-NOV-2002; 2002US-00292413.
                                                                                                                                                                                                                                                                                                                                   07-NOV-2001; 2001US-0336968P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diamond DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9; Conservative
                                                                                                                                                   Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                                                (SIMA/) SIMARD J J L.
                                                                                                                                                                                                                                                                                                                                                                                                (DIAM/) DIAMOND D C.
(QIUZ/) QIU Z.
(LEIX/) LEI X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-167209/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 HLGNVKYLV
                                                                                                                                                                                                  US2003228634-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 9 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Simard JJL,
                                                                                                                                                                                                                                            11-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADQ10943;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
ADQ10943
8
```

```
antimalarial; cytostatic;
                                                                                WO2003066833-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200224224-A2
                                                                                                                                                                                                                                                                                  core particlé.
                                                                                                      14-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA017442;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                       nalaria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8
AAO17442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                             frame comprising a first sequence, where the first sequence encodes one or more segments of tumour-associated antigen SSx-2, which comprises a caquence of 188 amino acids (SEQ ID NO: 40), where the first sequence does not encode the complete SSX-2 antigen, and where the first sequence comprises an epitope cluster, the cluster comprising or encoding at least two amino acid sequences having a known or predicted affinity for a same MHC receptor peptide binding cleft. Also described are: an isolated polypeptide comprising the amino acid sequence encoded in the reading frame, and an immunogenic composition comprising (1) or the polypeptide of (1). (1) is a nucleic acid encoding a tumour-associated antigen SSX-2 composition go tumour-associated antigen SSX-2 comprising a fully defined sequence of 188 amino acids (SEQ ID NO: 40). The nucleic acid, the encoded antigen, and composition are useful in conducing an immune response and in treating cancer. Expression cassettes are used in vaccine vectors. This is the amino acid sequence of a T-cell compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Plasmodium epitope #6 for method to augment CD8+ T-cell immune response.
                                          immunostimulant; cytostatic; vaccine; tumour-associated antigen SSX-2; SSX-2 antigen; epitope cluster; MHC receptor peptide binding cleft; immunogenic composition; immuno response; cancer; vaccine vector; epitope liberation; human leukocyte antigen; HLA A2-specific CTL; cytotoxic T lymphocyte; T-cell epitope.
                                                                                                                                                                                                                                                                                                                                                          encoding tumor-associated antigen SSX-2, useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 48; DB 8; Length 9; 100.0%; Pred. No. 1.7e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                     inducing an immune response and in treating cancer
                      Plasmodium falciparum T-cell epitope segid 508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 508; 260pp; English.
                                                                                                                                                                                                                                                                                                            Lei X;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADE79950 standard; peptide; 15 AA
                                                                                                                                                                                                                                                                                                             Qiu Z,
                                                                                                                                                                                        10-FEB-2004; 2004US-00777053.
                                                                                                                                                                                                              07-NOV-2001; 2001US-0336968P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 10v.v.
Best and 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               described in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
(first entry)
                                                                                                                                                                                                                                                                                                            ,
20
                                                                                                                                                                                                                                                 (SIMA/) SIMARD J J L.
(DIAM/) DIAMOND D C.
(QIUZ/) QIU Z.
(LEIX/) LEI X.
                                                                                                                   Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         σ
                                                                                                                                                                                                                                                                                                             Diamond
                                                                                                                                                                                                                                                                                                                                   WPI; 2004-517003/49.
                                                                                                                                                                                                                                                                                                                                                          nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HLGNVKYLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HLGNVKYLV
                                                                                                                                          US2004132088-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 9 AA;
23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JAN-2004
                                                                                                                                                                  08-JUL-2004.
                                                                                                                                                                                                                                                                                                            Simard JJL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADE79950;
                                                                                                                                                                                                                                                                                                                                                          Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADE79950
ID ADE7
XX
AC ADE7
XX
DT 29-J
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

```
Tuberculosis, TB, vaccination, vaccine, CD4+ T cell immune response, poxvirus vector; HTV; malaria; Helicobacter pylori; influenza; hepatitis; viral infection; leprosy, protozoan parasite; cancer; tuberculostatic; anti-HIV; protozoacide; antibacterial; virucide; hepatotropic; antileflammatory; antileprotic; cytostatic; epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a method of generating an immune response against a non-hepadnaviral antigen in a mammal by administering (to the mammal) at least 1 dose of a priming component comprising a recombinant hepatitis B core particle (rHEP) (which is a carrier for 1 or more non-hepadnaviral CD8+ T-cell epitopes of the antigen). The method may be supplemented by the use of a boosting stage comprising a non-replicating or replication-impaired recombinant poxvirus vector. The method is useful for generating an immune response against a non-hepadnaviral antigen in a mammal for treating or preventing cancer or malaria. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Generating an immune response against a non-hepadnaviral antigen in a mammal, useful for treating or preventing cancer or malaria, by administering a priming component comprising a recombinant hepatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                           non-hepadnaviral antigen; hepatitis B core particle; CD8+ T-cell; epitope; poxvirus vector; cancer; malaria; epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Score 48; DB 7; Length 15; ; Pred. No. 0.013; 0; Mismatches 0; Indels
vaccine; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P falciparum TRAP CD4+ T cell epitope #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 57; SEQ ID NO 6; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         UYNY-) UNIV NEW YORK MEDICAL CENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAO17442 standard; peptide; 20 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                         07-FEB-2003; 2003WO-US003897.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-FEB-2002; 2002US-0354963P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JUL-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zavala F, Birkett AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-748124/70.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 HLGNVKYLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
```

ഹ

```
ö
                                                                                                                                                                                                                                                                               The present invention relates to a method of inducing a CD4+ T-cell response against a target antigen, by administering two different compositions comprising a source of CD4+ T-cell epitope(s) of the target antigen, where the second composition further includes an epitope which is same as the epitope of the first composition, where the source of the epitopes for the compositions is a non-replicating or replication impaired recombinant poxvirus vector. The methods are useful for inducing CD4+ T-cell immune responses against diseases such as tuberculosis, human immunodeficiency virus (HIV) (persistent viral infection), malania, Helicobacter pylori, influenza, hepatitis (chronic hepatitis B and C), cytomegalovirus (CMV), viral infection, herpes virus-induced disease, leprosy and diseases caused by non-malarial protozoan parasite such as toxoplasma and cancer. The present sequence is an epitope from Plasmodium falciparum useful in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CD8+ T-cell; immune response; antigen; priming composition; CTL; epitope; cytotoxic T lymphocyte; boosting; poxvirus vector; PVV; pathogen; tumour; malaria; parasite; P. falciparum; viral; bacterial; parasitic; cancer;
                                                                                                                                                                         Inducing CD4+ T-cell response against target antigen by administering a composition comprising a source of CD4+ epitopes which is a non-replicating or replication impaired recombinant poxvirus vector.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Schneider J, Plebanski M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 48; DB 5; Length 20; 100.0%; Pred. No. 0.019; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Amino acid sequence of the malaria (M) string CTL epitope
                                                                                                         Schneider J;
                                                                                                        Reece W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          melanoma; HIV; breast; colon; vaccination.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gilbert SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY03681 standard; protein; 229 AA.
                                                                                                      Hill AVS, Mcshane H, Gilbert S,
                                                                                                                                                                                                                                                 Example 2; Page 32; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mcmichael AJ, Hill AVS, Gilbert
Hanke T, Smith GL, Blanchard T;
                                                                    (OXXO-) OXXON PHARMACCINES LTD
                                   21-SEP-2000; 2000GB-00023203.
13-SEP-2001; 2001WO-GB004116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98WO-GB001681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97GB-00011957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS INNOVATION LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 HLGNVKYLV 9
                                                                                                                                           WPI; 2002-394098/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-070325/06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9856919-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY03681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 9
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

```
The invention relates to methods and reagents for generating a protective CD8+ T-cell immune response against at least one target antigen. The kits of the invention comprises (i) as priming composition, a source of one or more CD8+ T-cell [cytotoxic T lymphocytes-(CTL)] epitopes of the target antigen, plus a carrier and (ii) as boosting composition a source of CTL epitopes, with at least one CTL epitope the same as used in (i), with this source being a non-replicating or replication-impaired recombinant poxvirus vector (PVV) plus a carrier. If the source of CTL epitopes in (i) is a viral vector, then the vector in (ii) is from a different virus. The kits are used to generate an immune response (prophylactic or therapeutic) against pathogens or tumours, specifically against malaria parasites such as P. falciparum, or HIV, and also many other bacterial,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                    viral or parasitic pathogens. The kits are also used for protective responses against melanoma and cancer of breast or colon, and generally wherever a strong CDB+ response is protective. The boosting composition may be used alone to boost a naturally primed response against malaria. The specified PVV provide an excellent booster effect, better than that from wild-type poxvirus, resulting in complete rather than partial protection against sporozoite challenge. Also PVV are safer to use than
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA cloned from Plasmodium falciparum - used to prepare polypeptide(s) used in vaccines for persons suffering from or at risk from malaria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
           Generating CD8-positive T cell response to target antigen using recombinant poxvirus - for treating or preventing malaria and HIV infection, also epitope strings from Plasmodium and HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               / Match 100.0%; Score 48; DB 2; Length 229; Local Similarity 100.0%; Pred. No. 0.29; Los 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Plasmodium falciparum; malaria; vaccine; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Circumsporozoite (CS)-related protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR05427 standard; protein; 559 AA.
                                                                                        Example 1; Page 20; 85pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plasmodium falciparum; T.9/96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89WO-GB000895.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88GB-00019209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REEX-) RES EXPLOITATION LID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   THRE-) 31 RES EXPL LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88 HLGNVKYLV 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Robson KJ, Hall JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1990-083478/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 HLGNVKYLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; AAQ02047.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          wild-type virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 229 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-AUG-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-JUL-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-OCT-2003
25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9001496-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-FEB-1990.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR05427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR05427
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

```
ö
                                                parasite. The CS related protein can be used to produce vaccines. The antibodies can be used for purificn. of the polypeptides. The vector may be a recombinant virus, esp. baculovirus or the peptide can be chemically prepared. Fragments of the peptide preferably contain a conserved sequence, egresidues 244 to 291 and more particularly a polypeptide selected from the following group: A) WDEWSPCSVTCGKGTRRRR B) WDEWSPCSVTCGKGTR. O EWSPCYTCGKGTR. O PSCYTCGK ED WSPCSVTCG See also AAQ02049. (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to standardise OS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Helper T-cell peptide; human leucocyte antigen; HLA; DR4w4; DR1; DR7; cytotoxic T lymphocyte; CTL; hepatitis; autoimmune disease; acquired immune deficiency syndrome; malaria; cancer; allografe rejection; allogray; Lyme disease; hepatitis; post-streptococcal endocarditis; glomerulonephritis;
                                                                                                                                                                                                                                                                          Gaps
                                       CS protein is produced during the merozoite stage of the malaria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Composition containing peptide that induces cytotoxic T lymphocyte response, and helper peptide - can bind to human leucocyte antigen alleles, used to treat or prevent cancers, parasitic infections and autoimmune disease.
                                                                                                                                                                                                                                                                          ó,
                                                                                                                                                                                                                                             100.0%; Score 48; DB 2; Length 559; 100.0%; Pred. No. 0.8;
                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Helper T-cell peptide derived from a TRAP protein.
                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                          AAW85142 standard; peptide; 15 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 11; Page 37; Slpp; English.
            Disclosure; Page ?; 49pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US001373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97US-0036713P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-0037432P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                   HLGNVKYLV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hypersensitivity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (EPIM-) EPIMMUNE INC.
                                                                                                                                                                                                                                                                                                       σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sette A, Sidney J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1998-427679/36
                                                                                                                                                                                                                                                                                                       1 HLGNVKYLV
                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                   Sequence 559 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W09832456-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JUL-1998.
                                                                                                                                                                                                                                                                            6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-FEB-1999
                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW85142
                                                                                                                                                                                        field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   food
                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                         ਨੇ
```

AAW85138-283 represent helper T-cell peptides, which can bind to the human leucocyte antigens (HLA) DR4w4, DR1 and DR7. The peptides are used in the course of the invention. The specification describes peptides that that induce a cytotoxic T lymphocyte (CTL) response, and T-helper peptides, that are used together to generate a CTL response for the

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to selecting a protein variant having modified immunogenicity, compared to a parent protein, comprising using the antibody binding sequence to localise epitope sequences on the three dimensional structure of the parent protein and defining an epitope area including amino acids within 5 Angstrom of the epitope amino acids. The method is useful for identifying structural epitopes on the 3-dimensional surface of commercial and environmental allergens. Compositions protein variants are used as vaccines, detergents and personal care compositions, e.g. shampoo, balsam, hair conditioners, hair waving compositions, hair dyeling compositions, hair tonic, hair liquid, hair cream, hair rinse, hair spray, chewing gum, skin cream, sunscreen, shaving foam, cream soap, skin milk or foundation. The present sequence is that of a polypeptide of the invention
treatment or prevention of viral, fungal, bacterial or parasitic infections (e.g. hepatitis, acquired immune deficiency syndrome or malaria) or cancer (e.g. renal or cervical carcinoma, lymphoma, prostate cancer or condyloma acuminatum). Helper T-cell peptides may be used alone to induce a helper T cell response, e.g. in cases of autoimmune disease, allograft rejection, allergy, Lyme disease, hepatitis, post-streptococcal endocarditis, glomerulonephritis and food hypersensitivity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Allergen; protein coordinate data; vaccine; antiallergic; immunogenicity; detergent; personal care composition; cosmetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Selecting protein variants having modified immunogenicity, used to produce vaccines, detergents and personal care compositions, involves localizing epitope sequences on the three-dimensional structure of a
                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Von Der Osten C;
                                                                                                                                                                           Length 15;
                                                                                                                                                                                                            0; Indels
                                                                                                                                                                           DB 2;
0.54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Friis EP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Allergen profilin-birchpollen SEQ ID NO 20.
                                                                                                                                                                                                               Mismatches
                                                                                                                                                                           Score 40;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 67; Page 495; 513pp; English.
                                                                                                                                                                                                                                                                                                                                                                    ABM00029 standard; protein; 123 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Svendsen A,
                                                                                                                                                                                                               ;
0
                                                                                                                                                                             83.3%; 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-APR-2000; 2000DK-00000707.
10-MAY-2000; 2000US-0203345P.
28-FEB-2001; 2001DK-00000327.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-MAR-2001; 2001US-0277817P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-APR-2001; 2001WO-DK000293.
                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                           Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Roggen EL, Ernst S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (NOVO ) NOVOZYMES AS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-626552/72
                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                     1 LGNVKYLV
                                                                                                                                                                                                                                                 LGNVKYLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 123 AA;
                                                                                                                                             Sequence 15 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200183559-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                        02-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-NOV-2001
                                                                                                                                                                                                                                                 N
                                                                                                                                                                                                                                                                                                                                                                                                       ABM00029;
                                                                                                                                                                             Query Match
                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                     RESULT 12
                                                                                                                                                                                                                                                                                                                                                                       8888888888888
                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                   ð
```

RESULT 13 AAR22261

Matches

ઠે 셤

```
The birch pollen allergen protein P14 (AAR71926) is encoded by the cDNA sequence AAQ89191. The allergen has affinity for poly(L-proline); the use of poly(L-proline) for affinity purification or for in vitro diagnosis of P14 and highly similar proteins is claimed. (Updated on 16-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Use of poly(L-proline) in in vitro diagnosis of P14 birch allergen. - as substitute for antibody, also for allergen purification and recovery from
                                                                                                                                                                                                                            114 .133
/label= epitope
/note= "when coupled to beta-galactosidase, this peptide
represents an IgE-binding epitope"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Major histocompatibility complex; class II; desensitising; human; allergen; grass; tree; weed; pollen; fungi; mould; food; insect; sting; chiromidae; spider; mite; housefily; fruit fly; sheep blow fly; honeybee; screw worm fly; grain weevil; slikworm; bee moth; larvae; mealworm; cat; cockroach; beetle; dog; horse; ow; pig; sheep; rabbit; rat; guinea pig; mice; gerbil; vaccine; treatment; prevention; hypersensitivity.
                                                                                                                            Birch tree pollen allergen; P14 protein; pollinosis; profilin; in vitro diagnosis; antigenicity; poly L-proline; affinity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Betula sp. allergen 130975 Bet v 2 protein fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                              (BIOM-) BIOMAY BIOTECHNIK PRODN & HANDELS GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 39; DB 2;
Pred. No. 10;
2; Mismatches 1
                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY25650 standard; protein; 133 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81.2%;
66.7%;
                                                                                                                                                                                                                                                                                                                                                                             94AT-00000740.
                                                                                                                                                                                                                                                                                                                                                                                                              94AT-00000740.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Fig 4; 38pp; German.
                                            (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                             Birch pollen P14 allergen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ||| :||:|
HLGGIKYMV 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1995-115733/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 HLGNVKYLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB; AAQ89191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 133 AA;
                                                                                                                                                                            Betula pendula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pollen extract
                                                                                                                                                                                                                                                                                                                                                                             13-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                              13-AUG-1990;
                                           16-OCT-2003
09-NOV-1995
                                                                                                                                                                                                                                                                                                             AT9400740-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-SEP-1999
                                                                                                                                                                                                                                                                                                                                              15-FEB-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY25650;
             AAR71926;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68
                                                                                                                                                                                                                            Peptide
                                                                                                                             Birch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY25650
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The protein sequence was deduced from the cDNA encoding the P14 allergen from birch obtd. by screening a cDNA library constructed from birch pollen. The full length gene for P14 was expressed in pKRZ33-3, encoding a protein of 133 amino acids. The protein can be used to immunologically detect IgE antibodies in serum to diagnose allergies, allowing for hyposensitisation therapy of people with pollen or food allergies, and to detect allergic reactions to P14. See also AAR22260. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 24-OCT-2003 to standardise OS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Recombinant DNA encoding polypeptide with epitope(s) of P14 allergens - for treatment and diagnosis of pollen or food allergy, and for purificn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pettenburg K, Breitenbac M, Kraft D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                             Epitopes; pollen; food allergy; IgE antibodies; hyposensitisation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                              ö
            Length 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81.2%; Score 39; DB 2;
66.7%; Pred. No. 10;
iive 2; Mismatches
             DB 4;
                           9.3;
                                            2; Mismatches
            Score 39;
Pred. No.
                                                                                                                                                                                           AAR22261 standard; protein; 133 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig 4; 68pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Duchene M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91WO-EP001513.
          81.2%;
66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90AT-00001685
91US-00683832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BIOM-) BIOMAY BIOTECH PROD
                                                                                                                                                                                                                                                           (revised)
(revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 66.7
tes 6; Conservative
                                            6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scheiner O;
                                                                                                ||| :||:|
58 HLGGIKYMV 66
                                                                                                                                                                                                                                                                                                                             P14 allergen of birch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ||| :||:|
HLGGIKYMV 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 HLGNVKYLV 9
                                                                             1 HLGNVKYLV 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1992-096895/12.
                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Uche,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of P14 allergens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB; AAQ22352.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 133 AA;
                                                                                                                                                                                                                                                                                                                                                                                              Betula pendula,
                                                                                                                                                                                                                                                         24-OCT-2003
25-MAR-2003
09-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-APR-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                               WO9203551-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-MAR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Valenta R,
Rumpold H,
                                                                                                                                                                                                                            AAR22261;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
             Query Match
```

ö

Gaps

; 0

Betula sp

AAR71926 standard; protein; 133 AA.

RESULT 14 AAR71926 ID AAR71

field)

Best Loca Matches

ઠે

:::

Query Match
Best Local Similarity 66.7%; Pred. No. 10;
Matches 6; Conservative 2; Mismatches 1; Indels
Qy 1 HLGNVKYLV 9
Db 68 HLGGIKYMV 76
Search completed: December 6, 2004, 15:26:06
Job time: 131 secs

0; Gaps

3

```
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

mode1
3
using
search,
protein
1
protein
Š

i, 2004, 15:14:37 ; Search time 119 Seconds	(without alignments)	27.131 Million cell updates/sec
2004,		
6,		
December		
Run on:		

US-10-042-202-17 1 KNKEKALII 9 Perfect score: Sequence: BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

2002273 segs, 358729299 residues Searched:

2002273 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries

A_Geneseq_23Sep04:* 1: qenesem1980~.* Database

geneseqp2002s:* geneseqp2003as:* geneseqp2003bs:* geneseqp1980s:*
geneseqp1990s:*
geneseqp2000s:*
geneseqp2001s:* geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	Aar87283 Plasmodiu	Ade79963 Plasmodiu	Aay03664 Amino aci	Aay03681 Amino aci	Aar05427 Circumspo		Abb47928 Listeria	Abp40575 Staphyloc		Ade79962 Plasmodiu	Abo68759 Pseudomon	Abp38607 Staphyloc	Adm87702 Human EST	Abm70065 Photorhab	Abo64995 Klebsiell	Adj66998 Human sec		Aag15384 Arabidops			Abu40414 Protein e	Aag38716 Arabidops		Abu51129 Helicobac	Aag38715 Arabidops
ΙD	AAR87283	ADE79963	AAY03664	AAY03681	AAR05427	ADA48468	ABB47928	ABP40575	AAR87282	ADE79962	AB068759	ABP38607	ADM87702	ABM70065	AB064995	ADJ66998	ADM87247	AAG15384	AAG15383	ABU51874	ABU40414	AAG38716	AAG22006	ABU51129	AAG38715
DB	7	7	~	~	7	9	S	Ŋ	7	7	7	Ŋ	œ	ø	7	c o	œ	ო	m	'n	9	٣	m	Ŋ	т
Length	0	σ	11	229	559	348	177	227	σ	ō	224	467	102	171	181	303	369	440	459	119	137	142	142	159	164
% Query Match	100.0	100.0	100.0	100.0	100.0	92.9	90.5	83.3	81.0	81.0	81.0	81.0	78.6	78.6	78.6	78.6	78.6	78.6	78.6	76.2	76.2	76.2	76.2	76.2	76.2
Score	42	42	42	42	42	39	38	35	34	34	34	34	33	33	33	33	33	33	33	32	32	32	32	32	32
Result No.	п	7	٣	4	ς.	9	7	α0	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Aag22005 Arabidops	Adc97603 E. faeciu	Aaw27941 Staphyloc	Aag22004 Arabidops		AbuS0835 Helicobac	Aaw20722 H. pylori	Abu51739 Helicobac	Aar64140 Heymann n	Abu51761 Helicobac	Abu51349 Helicobac	Aau35694 Helicobac	Abu30690 Protein e	Abul7482 Protein e	Abu24333 Protein e	Abu23836 Protein e	Abu51958 Helicobac	Aaw14068 Helicobac	Aab46319 H. pylori	Aay35710 Chlamydia
AAG22005	ADC97603	AAW27941	AAG22004	AAG38714	ABU50835	AAW20722	ABU51739	AAR64140	ABU51761	ABU51349	AAU35694	ABU30690	ABU17482	ABU24333	ABU23836	ABU51958	AAW14068	AAB46319	AAY35710
m	7	~	m	m	S	~	ß	7	ß	Ŋ	4	9	ø	9	9	ß	~	4	~
164	166	167	168	168	179	234	264	269	287	314	352	352	355	358	359	440	732	733	810
76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2		76.2		76.2		76.2
32	32	35	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
56	27	28	59	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

AAR87283 standard; peptide; 9 AA. (first entry) 16-MAY-1996 AAR87283; RESULT 1 AAR87283

Plasmodium falciparum HLA-B8 restricted epitope tr43.

Thrombospondin-related anonymous protein; human leucocyte antigen; HLA; class 1; HLA-B8; epitope; malaria; vaccine; CTL induction; cytotoxic T lymphocyte; TRAP.

Plasmodium falciparum.

WO9526982-A2.

12-OCT-1995.

95WO-GB000737. 31-MAR-1995; 94GB-00006492. 31-MAR-1994;

(ISIS-) ISIS INNOVATION LTD.

Aidoo M, Allsopp CEM, Lalvani A, Plebanski M; Hill AVS, A

WPI; 1995-358584/46.

Plasmodium falciparum peptide(s) - useful in vaccine compositions for immunising against malaria.

Claim 1; Page 18; 23pp; English.

Cytotoxic T lymphocytes from malaria-exposed Gambian individuals with HLA-BB showed significant lysis of a pool of the four peptides tr42, tr43, tr44 and tr45 (all derived from Plasmodium falciparum thrombospondin-related anonymous protein (TABP). The peptides tr42 and tr43 (AAR87282 and AAR87283) bound to HLA-BB in the HLA assembly assay. Subsequently, the same CTL line showed specific lysis of tr42 only, while CTL from another adult showed specific lysis of the tr43 peptide, identifying tr42 and tr43 as overlapping HLA-BB restricted epitopes. These peptides will be useful in a malaria vaccine

Sequence 9 AA;

ADE79963;

염 ò

```
The invention relates to methods and readents to generating a productive CC CPB+ T-cell immune response against at least one target antigen. The kits of the invention comprises (i) as priming composition, a source of one or cof the invention comprises (ii) as boosting composition a source of one or antigen, plus a carrier and (ii) as boosting composition a source of CTL epitopes, with at least one CTL epitope the same as used in (i), with this source being a non-replicating or replication-impaired recombinant this source being a non-replicating or replication-impaired recombinant composition as viral vector, then the vector in (ii) is from a different virus (i) is a viral vector, then the vector in (ii) is from a different virus (i) is a viral vector, then the vector in (ii) is from a different virus (i) as a viral vector, then the vector in (ii) is from a different virus (i) is a viral vector, then the vector in (iii) is from a different virus (iv) against pathogens or tumours, specifically against malaria (viral or parasitic pathogens. The kits are also used for protective viral or parasitic pathogens. The kits are also used for protective consposition wherever a strong CDB+ response is protective. The boosting composition composition may be used alone to boost a naturally primed response against malaria. The specified PVV provide an excellent booster effect, better than that protection against sporozoite challenge. Also PVV are safer to use than wind-type virus. Sequences AAY03661-680 represent CTL peptide epitopes of the malaria (M) string
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to methods and reagents for generating a protective
                                                                                                                          CD8+ T-cell; immune response; antigen; priming composition; CTL; epitope; cytotoxic T lymphocyte; boosting; poxvirus vector; PVV; pathogen; tumour; malaria; parasite; P. falciparum; viral; bacterial; parasitic; cancer; melanoma; HIV; breast; colon; vaccination.
                                                                                  Amino acid sequence of the malaria (M) string CTL epitope Tr42/43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Generating CD8-positive T cell response to target antigen using recombinant poxyirus - for treating or preventing malaria and HIV infection, also epitope strings from Plasmodium and HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gilbert SC, Schneider J, Plebanski M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 42; DB 2; Length 11;
100.0%; Pred. No. 0.22;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY03681 standard; protein; 229 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Blanchard T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 38; Page 18; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                    98WO-GB001681.
                                                                                                                                                                                                                                                                                                                                                                                                                               97GB-00011957.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS INNOVATION LTD.
                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcmichael AJ, Hill AVS,
Hanke T, Smith GL, Blan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KNKEKALII 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             σ
                                                                                                                                                                                                                                                     Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-070325/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 KNKEKALII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-PSDB; AAX29204.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 11 AA;
                                                                                                                                                                                                                                                                                                                                                                                         09-JUN-1998;
                                                                                                                                                                                                                                                                                               WO9856919-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                    1997;
                                                 07-JUN-1999
                                                                                                                                                                                                                                                                                                                                               17-DEC-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY03681;
    AAY03664;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY03681
ID AAYC
XX
AC AAYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a method of generating an immune response against a non-hepadnaviral antigen in a mammal by administering (to the mammal) at least 1 dose of a priming component comprising a recombinant hepatitie B core particle (rHEP) (which is a carrier for 1 or more non-hepadnaviral CD8+ T-cell epitopes of the antigen). The method may be supplemented by the use of a boosting stage comprising a non-replicating or replication-impaired recombinant poxvirus vector. The method is useful for generating an immune response against a non-hepadnaviral antigen in a mammal for treating or preventing cancer or malaria. This sequence
                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                              Plasmodium epitope #19 for method to augment CD8+ T-cell immune response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mammal, useful for treating or preventing cancer or malaria, by administering a priming component comprising a recombinant hepatitis B core particle.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                      antimalarial; cytostatic; vaccine; immune response;
non-hepadnaviral antigen; hepatitis B core particle; CD8+ T-cell;
epitope; poxvirus vector; cancer; malaria; epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
              Length 9;
                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 42; DB 7; I
ilarity 100.0%; Pred. No. 1.78+06;
Conservative 0; Mismatches 0.
              100.0%; Score 42; DB 2; I
100.0%; Pred. No. 1.7e+06;
                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 57; SEQ ID NO 19; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYNY-) UNIV NEW YORK MEDICAL CENT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY03664 standard; peptide; 11 AA.
                                                                                                                                                                                                                                                                 ADE79963 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-FEB-2003; 2003WO-US003897.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-FEB-2002; 2002US-0354963P
                                                                                                                                                                                                                                                                                                                                                          (first entry)
Query Match
Best Local Similarity 100..
Local 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Birkett AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-748124/70.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KNKEKALII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
les 9; Conserv
                                                                                                                                           KNKEKALII
                                                                                                            1 KNKEKALII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003066833-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 9 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Plasmodium sp
                                                                                                                                                                                                                                                                                                                                                             29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zavala F,
```

RESULT 2
ADE79963
ADE79963
ANC ADE ANC ADEA ANC ADE ANC ADEA ANC AD

ö

0; Gaps

Query Match

Best Loc Matches

ð

RESULT 3
AAY03664
ID AAY0:

```
The invention relates to methods and reagents for generating a protective CD8+ T-cell immune response against at least one target antigen. The kits CD8+ T-cell immune response against at least one target antigen. The kits correctly invention compression, a source of one or more CD8+ T-cell [cytotoxic T lymphocytes-(CTL)] epitopes of the target antigen, plus a carrier and (ii) as boosting composition a source of CTL epitope the same as used in (1), with this source being a non-replicating or replication-impaired recombinant poxylinus vector (PVV) plus a carrier. If the source of CTL epitopes in (1) is a viral vector, then the vector in (ii) is from a different virus. The kits are used to generate an immune response (prophylactic or therapeutic) against pathogens or tumours, specifically against malaria parasites such as P. falciparum, or HIV, and also meny other bacterial, viral or parasitic pathogens. The kits are also used for protective cresponse against melanoma and cancer of breast or colon, and generally wherever a strong CD8+ response is protective. The boosting composition may be used alone to boost a naturally primed response against malaria. The specified PVV provide an excellent booster effect, better than that the protection against sporozoite challenge. Also PVV are safer to use than
                                                                                           CD8+ T-cell; immune response; antigen; priming composition; CTL; epitope; cytocoxic T lymphocyte; boosting; poxvirus vector; PVV; pathogen; tumour; malaria; parasite; P. falciparum; viral; bacterial; parasitic; cancer; melanoma; HIV; breast; colon; veccination.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Generating CD8-positive T cell response to target antigen using recombinant poxvirus - for treating or preventing malaria and HIV infection, also epitope strings from Plasmodium and HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                Schneider J, Plebanski M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 42; DB 2; Length 229; 100.0%; Pred. No. 4.6;
                                                      Amino acid sequence of the malaria (M) string CTL epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                              Mcmichael AJ, Hill AVS, Gilbert SC,
Hanke T, Smith GL, Blanchard T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR05427 standard; protein; 559 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 20; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                              98WO-GB001681.
                                                                                                                                                                                                                                                                                                                                                     97GB-00011957.
                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS INNOVATION LTD
                  07-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
                                                                                                                                                                                           Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KNKEKALII 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-070325/06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 KNKEKALII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 9; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 229 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           wild-type virus
                                                                                                                                                                                                                                 WO9856919-A2
                                                                                                                                                                                                                                                                                                              09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                     09-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-OCT-2003
25-MAR-2003
                                                                                                                                                                                                                                                                        17-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR05427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 5
AAR05427
ID AAR0
XX
AC AAR0
XX
DT 24-O
DT 25-M
셤
```

```
The CS protein is produced during the merozoite stage of the malaria parasite. The CS-related protein can be used to produce vaccines. The antibodies can be used for purificn. of the polypeptides. The vector may be a recombninant virus, esp. baculovirus or the peptide can be chemically prepared. Fragments of the peptide preferably contain a conserved sequence, egressidues 244 to 291 and more particularly a polypeptide selected from the following group: A) WDBWSPCSVTCGKGTRSRK B) WDBWSPCSVTCGKGTR C) EWSPCVTCGKG D) PCSVTCGKG B) WSPCSVTCG See also MAR-2003 to correct P1 field.) (Updated on 25-MAR-2003 to correct P2 field.)
                                                                                                                                                                                                                                                                                                                                 DNA cloned from Plasmodium falciparum - used to prepare polypeptide(s) used in vaccines for persons suffering from or at risk from malaria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    disease resistance; pathogen tolerance; plant pathogen; plant; rice.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 42; DB 2; Length 559; 100.0%; Pred. No. 11; 0; Indels ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rice protein conferring disease resistance in plants.
                                                    Plasmodium falciparum; malaria; vaccine; ss.
                          Circumsporozoite (CS)-related protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADA48468 standard; protein; 348 AA.
                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page ?; 49pp; English.
                                                                               Plasmodium falciparum; T.9/96
                                                                                                                                                                                                                        (REEX-) RES EXPLOITATION LTD.
                                                                                                                                                                 89WO-GB000895
                                                                                                                                                                                           88GB-00019209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-JUN-2002; 2002WO-IB002453.
26-JUL-1990 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9; Conservative
                                                                                                                                                                                                                                     (THRE-) 31 RES EXPL LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     109 KNKEKALII 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 KNKEKALII 9
                                                                                                                                                                                                                                                              Robson KJ, Hall JR;
                                                                                                                                                                                                                                                                                        WPI; 1990-083478/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                      N-PSDB; AAQ02047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 559 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003000906-A2.
                                                                                                                                                                                           .2-AUG-1988;
                                                                                                                                                               04-AUG-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-NOV-2003
                                                                                                          WO9001496-A.
                                                                                                                                     22-FEB-1990.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-JAN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADA48468;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
ADA48468
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
```

22-JUN-2001; 2001US-0300112P.

Gaps

ö

0; Indels

```
ö
                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel isolated polynucleotide comprising a plant nucleotide sequence having an open reading frame that encodes a polypeptide associated with disease resistance or its fragment having substantially the same activity as the full-length polypeptide. The polynucleotide of the invention is useful for conferring resistance or tolerance to a plant pathogen. The present sequence represents a protein conferring disease resistance used in the invention.
                                                                                                                                                                                                                           New polynucleotide comprising a plant nucleotide sequence having an open reading frame that encodes a polypeptide associated with disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Buchrieser C, Frangeul L, Couve E, Rusniok C, Fsihi H, Dehoux P; Dussurget O, Chetouani F, Nedjari H, Glaser P, Kunst F, Cossart P; Daniels J, Goebel W, Kreft J, Kuhn M, Ng E, Vazquez-Borland JA; Dominguez-Bernal G, Garrido-Garcia P, Tierrez-Martinez A, Amend A; Chakraborty T, Domann E, Hain T, Berche P, Charbit A, Durant L; Perez-Diaz J, Baquero F, Garcia Del Portillo F, Gomez-Lopez N; Maduenio E, De Pablos B, Wehland J, Kaerst U, Entian K, Hauf J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                  reading frame that encodes a polypeptide associated with disease resistance, useful for conferring resistance or tolerance to a plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antibacterial; gene therapy; vaccine; biosynthesis; biodegradation; vitamin B12; bacterial infection; disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                   , Moughamer T;
Zhu T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92.9%; Score 39; DB 6; Length 348; 77.8%; Pred. No. 26; ive 2; Mismatches 0; Indels
                                                                                                          SA,
                                                                                                     , Goff SA,
Ricke D,
                                                                                                                                                                                                                                                                                                                                     Claim 10; SEQ ID NO 538; 299pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Listeria monocytogenes protein #632
                                                                                                          Cooper B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABB47928 standard; protein; 177 AA.
                                                              (SYGN ) SYNGENTA PARTICIPATIONS AG
                                                                                                        Glazebrook J, Briggs S, Cooper E
Katagiri F, Kreps J, Provart N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-APR-2001; 2001WO-FR001118.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-APR-2000; 2000FR-00004629
26-SEP-2001; 2001US-0352277P.
22-MAR-2002; 2002US-0366535P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 77.8
Les 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KNKEKALLV 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Listeria monocytogenes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (INSP ) INST PASTEUR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-010914/01
                                                                                                                                                                    WPI; 2003-184052/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Voss H;
                                                                                                                                                                                        N-PSDB; ADA48467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 348 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200177335-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABB47928,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rose M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
```

셤 ð

```
The present invention relates to the genome sequence of Listeria

common cytogenes EGD-e (see ABA03041). The genome sequence and fragments of

to are useful for selecting probes and primers for detecting genes in L.

common cytogenes and related organisms, and for studying genetic

monocytogenes and related organisms, and for studying genetic

components of the genome sequence of the present invention. Proteins

components in dentification of L. monocytogenes and related organisms, and

compounds is and blodegradation, especially blosynthesis of Vitamin

compounds that regulate gene expression and cell replication

compounds that regulate organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms. Note: The sequence data for this

compocytogenes and related organisms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 open reading frame; ORF; bacterial infection;
Genomic sequence for Listeria monocytogenes, useful e.g. for treatment and prevention of Listeria and related bacterial infections, and related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABN90538 to ABN93374 represent Staphylococcus epidermidis open reading
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel isolated nucleic acid encoding a Staphylococcus epidermis polypeptide, useful for diagnosing and treating bacterial infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Staphylococcus epidermidis ORF amino acid sequence SEQ ID NO:5420.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5; Length 177;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 38; DB 5; Pred. No. 21; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID NO 5420; 267pp; English.
                                                                                                 Claim 6; SEQ ID NO 633; 192pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABP40575 standard; protein; 227 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GENO-) GENOME THERAPEUTICS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0055779P.
97US-0064964P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-00134001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Staphylococcus epidermidis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antibacterial; gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Staphylococcus epidermidis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bush
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 88.9
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12 KNKEKVLII 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-381255/41.
N-PSDB; ABN93120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Doucette-Stamm LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 KNKEKALII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 177 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-AUG-1997;
08-NOV-1997;
                                                      polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABP40575;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

~

KNKEKAL

ò

```
ö
              given in ABP35124 to ABP37960. The S. epidermidis sequences have antibacterial activity and can be used in gene therapy. The sequences can also be used in the diagnosis and treatment of bacterial infections, particularly S. epidermidis infections. The sequences can be used to screen for compounds able to interfere with the S. epidermidis lifection. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from the USPTO web site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -B8 showed significant lysis of a pool of the four peptides tr42, tr43, tr44 and tr45 (all derived from Plasmodium falciparum thrombospondin-related anonymous protein (TRAP)). The peptides tr42 and tr43 (AAR87282 and AAR87283) bound to HLA-B8 in the HLA assembly assay. Subsequently, the same CTL line showed specific lysis of tr42 only, while CTL from another adult showed specific lysis of the tr43 peptide, identifying tr42 and tr43 as overlapping HLA-B8 restricted epitopes. These peptides will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cytotoxic T lymphocytes from malaria-exposed Gambian individuals with HLA
 (ORF) nucleic acid sequences which encode the amino acid sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Thrombospondin-related anonymous protein; human leucocyte antigen; HLA; class 1; HLA-B8; epitope; malaria; vaccine; CTL induction; cytotoxic T lymphocyte; TRAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Plasmodium falciparum peptide(8) - useful in vaccine compositions for
                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                           Length 227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lalvani A, Plebanski
                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 81.0%; Score 34; DB 2; Length 9; Best Local Similarity 100.0%; Pred. No. 1.7e+06; Matches 7; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plasmodium falciparum HLA-B8 restricted epitope tr42.
                                                                                                                                                                                                         Score 35; DB 5;
Pred. No. 1e+02;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Aidoo M, Allsopp CEM,
                                                                                                                                                                                                                                                                                                                                                                                                     AAR87282 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 18; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         be useful in a malaria vaccine
                                                                                                                                                                                                      83.3%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95WO-GB000737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94GB-00006492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS INNOVATION LTD
                                                                                                                                                                                     Query Match
Best Local Similarity 75.vv.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunising against malaria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-MAY-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Plasmodium falciparum
                                                                                                                                                                                                                                                                                                  11 NKEKALVV 18
                                                                                                                                                                                                                                                                              2 NKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1995-358584/46
                                                                                                                                                                       Sequence 227 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9526982-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-0CT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Whittle HC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hill AVS,
                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR87282;
   frame
                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                    AAR87282
888888888888888
                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                            ద
```

ö

Gaps

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a method of generating an immune response against a non-hepadnaviral antigen in a mammal by administering (to the mammal) at least 1 dose of a priming component comprising a recombinant hepatitis B core particle (rHEP) (which is a carrier for 1 or more non-hepadnaviral CD8+ T-cell epitopes of the antigen). The method may be supplemented by the use of a boosting stage comprising a non-replicating or replication-impaired recombinant poxvirus vector. The method is useful for generating an immune response against a non-hepadnaviral antigen in a mammal for treating or preventing cancer or malaria. This sequence represents a peptide epitope from Plasmodium the causative agent for
                                                                                                                                                                              Plasmodium epitope #18 for method to augment CD8+ T-cell immune response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              non-hepadnaviral antigen in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Generating an immune response against a non-hepadnaviral antigen in a mammal, useful for treating or preventing cancer or malaria, by administering a priming component comprising a recombinant hepatitis core particle.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                        CD8+ T-cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81.0%; Score 34; DB 7; Length 9; 100.0%; Pred. No. 1.7e+06; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                       vaccine, immune response,
hepatitis B core particle,
cancer, malaria, epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 57; SEQ ID NO 18; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABO68759 standard; protein; 224 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                        (UYNY-) UNIV NEW YORK MEDICAL CENT
                                                                                     ADE79962 standard; peptide; 9 AA.
                                                                                                                                                                                                                                                                                                                                                             07-FEB-2003; 2003WO-US003897.
                                                                                                                                                                                                                                                                                                                                                                                           08-FEB-2002; 2002US-0354963P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.v.
                                                                                                                                                 (first entry)
                                                                                                                                                                                                            antimalarial; cytostatic;
non-hepadnaviral antigen;
                                                                                                                                                                                                                                          epitope; poxvirus vector;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Birkett AJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-748124/70.
            6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 KNKEKAL 7
KNKEKAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 KNKEKAL
                                                                                                                                                                                                                                                                                                  WO2003066833-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 9 AA;
                                                                                                                                                                                                                                                                      Plasmodium sp
                                                                                                                                                 29-JAN-2004
                                                                                                                                                                                                                                                                                                                                 14-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zavala F,
                                                                                                                   ADE79962;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABO68759;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        malaria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AB068759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>අ</u>
          셤
                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                XXXXXX
```

```
ABN90538 to ABN93374 represent Staphylococcus epidermidis open reading frame (ORF) nucleic acid sequences which encode the amino acid sequences given in ABP35124 to ABP37960. The S. epidermidis sequences have antibacterial activity and can be used in gene therapy. The sequences can also be used in the diagnosis and treatment of bacterial infections, particularly S. epidermidis infections. The sequences can be used to screen for compounds able to interfere with the S. epidermidis life cycle or inhibit S. epidermidis infection. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from the USPTO web site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 respiratory; cytostatic; antiarthritic; antiinflammatory; gastrointestinal; antibacterial; immunosuppressive; antidiabetic; antirheumatic; gene therapy; molecular weight marker; chromosome tag; genetic fingerprinting; nutritional supplement; cancer; inflammatory condition, arthritis; inflammatory bowel disease; crohn's disease; sepsis; rheumatoid arthritis; diabetes mellitus type 1; graft versus host disease; human; expressed sequence tag; EST.
                                                                                                                                                                                                                                                                                                                                                                   Novel isolated nucleic acid encoding a Staphylococcus epidermis polypeptide, useful for diagnosing and treating bacterial infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 34; DB 5; Length 467
Pred. No. 3.3e+02;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ren F, Xue A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human EST derived amino acid sequence SEQ ID NO:795.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 3452; 267pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zhang J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADM87702 standard; protein; 102 AA.
                                                                                                                                                                                    (GENO-) GENOME THERAPEUTICS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-JUL-2001; 2001US-0306971P.
28-MAR-2002; 2002US-00112944.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-JUL-2002; 2002WO-US022858
                                                98US-00134001.
                                                                                                    97US-0055779P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    66.78;
                                                                                                                                                                                                                                          Bush D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27 KNKEKVLLL 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 KNKEKALII 9
                                                                                                                                                                                                                                                                                              WPI; 2002-381255/41.
N-PSDB; ABN91152.
                                                                                                                                                                                                                                             Doucette-Stamm LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (NUVE-) NUVELO INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 467 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2004009834-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                13-AUG-1998;
                                                                                                       14-AUG-1997;
08-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-JAN-2004
30-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADM87702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to Pseudomonas aeruginosa polypeptides and the polymicleotides encoding them. The sequences are useful in diagnosis and therepay of pathological conditions, as molecular targets for diagnosis and prophylaxis and treatment of pathological conditions resulting from a bacterial infection, for evaluating a compound, such as a polypeptide, for the ability to bind a P aeruginosa nucleic acid, as components of effective antibacterial targets, as targets for antibacterial drugs, including anti-P. aeruginosa drugs, as templates for recombinant to production of P. aeruginosa and/or treatment of P. aeruginosa-caused infection, and in detection of P. aeruginosa sequences or other sequences of pseudomonas species using biochip technology. Sequences ABO67826-CABO8436 represent P. aeruginosa polypeptides of the invention. Note: The sequence data for this patent did not form part of the printed sequence are all the printed sequence are all the printed sequence are all the printed sequences are all the pri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Staphylococcus epidermidis; open reading frame; ORF; bacterial infection; antibacterial; gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel isolated nucleic acid encoding Pseudomonas aeruginosa polypeptide, useful as molecular targets for diagnostics, prophylaxis and treatment of pathological conditions resulting from bacterial infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                      Bacterial infection; Pseudomonas aeruginosa infection; antibacterial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Staphylococcus epidermidis ORF amino acid sequence SEQ ID NO:3452.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81.0%; Score 34; DB 7; Length 224; 75.0%; Pred. No. 1.6e+02; ive 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bush D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; SEQ ID NO 17505; 455pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Deloughery C,
     Pseudomonas aeruginosa polypeptide #934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABP38607 standard; protein; 467 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                 (GENO-) GENOME THERAPEUTICS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seqdata.uspto.gov/sequence.html
                                                                                                                                                                                                                                                                             99US-00252991
                                                                                                                                                                                                                                                                                                                                   98US-0074788P
                                                                                                                                                                                                                                                                                                                                                                98US-0094190P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nolling J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Staphylococcus epidermidis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6; Conservative
                                                                                                                     Pseudomonas aeruginosa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |||:|||:
129 KNKQKALV 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2003-615309/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 KNKEKALI 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; ABD02330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 224 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rubenfield MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US6380370-B1
                                                                                                                                                                                                                                                                                   18-FEB-1999;
                                                                                                                                                                                                                                                                                                                                      L8-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-JUL-2002
                                                                                                                                                                         US6551795-B1
                                                                                                                                                                                                                                                                                                                                                                27-JUL-1998;
                                                                                                                                                                                                                            22-APR-2003.
```

ô

Gaps

٥;

Length 467;

Wang J;

Weng G,

Tang YT,

RESULT 12 ABP38607

Matches

ò g

```
The present invention describes an isolated polymucleotide (I): (a)

comprising a nucleotide sequence selected from SEQ ID NO:1-244; or (b)

which encodes a polypeptide with biological activity, where the
polymucleotide hybridises to (I) under stringent hybridisation conditions

cor has greater than 99% sequence identity with (I). (I) has respiratory,

cytostatic, antiarthritic, antiinflammatory, gastrointeetinal,

cytostation proteins encoding chimeric or fusion proteins and

heterologous protein sequences. antight markers on gels; as

cytostopes recombinant protein for analysis, characterisation or therapeutic

cytostions, ocompare and making the corresponding protein is

cytostions, ocompare with endogenous DNA sequences in patients to

constitutions, to compare with endogenous DNA sequences in patients to

constitutions, to compare with endogenous DNA sequences in the process of discovering other novel polymucleotides; for

sequences in the process of discovering other novel polymucleotides;

compositions anti-DNA antibodies or attachment to a gene chip or other

protein antibodies using DNA immunisation techniques; and as an antigen

to raise anti-DNA antibodies or also be used as nutritional sources

conspositions are useful for promoting better or faster closure of nor

compositions are useful for promoting better or faster closure of for

compositions ning vience and a sequence of interesting on injury in various risement of lung or liver fishers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          invention. N.B. The sequences for this patent were obtained from the USPTO web site from an equivalent US patent US20040048249A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage. The compositions can also be used to treat tinflammatory conditions (e.g. arthritis, inflammatory bowel disease or Crohn's disease), sepsis, rheumatorid arthritis, diabetes mellitus type 1 or graft versus host disease. The present sequence represents an expressed sequence tag (EST) derived amino acid sequence from the present
                                                                                                                               New isolated polynucleotides and polypeptides, useful for treating, e.g. cancer, lung or liver fibrosis, arthritis, inflammatory bowel disease, Crohn's disease, rheumatoid arthritis, diabetes mellitus type 1 or graft
     Wang Z;
Zhao QA,
                                                                                                                                                                                                                                                                   Example 2; SEQ ID NO 795; 591pp; English
  Wang D,
Ghosh MJ,
                                                    2004-143291/14.
                                                                                                                                                                                                               versus host disease.
                                                                                N-PSDB; ADM87484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 102 AA;
  Wehrman T,
```

Gaps ; 0 Score 33; DB 8; Length 102; Pred. No. 1.1e+02; 2; Mismatches 0; Indels 78.6%; 75.0%; 6; Conservative 2 NKEKALII 9 Query Match Best Local Similarity Matches 셤

ö

ö

ABM70065 standard; protein; 171 AA. (first entry) 20-NOV-2003 ABM70065; RESULT 14

Antibacterial; fungicide; insecticide; polymorphism; genetic analysis;

Photorhabdus luminescens protein sequence #3162.

The invention relates to the isolation of genes and their encoded proteins from Photorhabdus luminescens. The isolated sequences are sources of probes and primers for detecting the geneme of P. luminescens and related species; to study polymorphisms; for gene analysis and for detection/amplification of the genes. Antibodies (Ab) raised against the polymorphisms, for gene analysis and for detection/amplification of the genes are used for detection/identification of P. luminescens, e.g. in foods. The genes, proteins, Ab and cells that carry a gene-containing vector are used to select compounds that modulate, regulate, induce or inhibit expression of the genes in plants, modulate, recombinisms other than P. luminescens and are able to alter response or sensitivity to toxins and antibiotics production of the proteins, particularly toxins and carbinat production of the proteins, particularly toxins and carbinates, proteins, vectors containing the genes and Ab are also useful care sensitive to P. luminescens and fungicides. The genes, proteins, vectors containing the genes and Ab are also useful care sensitive to P. luminescens and containing the genes and fungicides. The biopesticides, other uses of the genes and the proteins are as virulence factors and for identifying targets of human diseases for which P. Luminescens and for identifying targets of human diseases for which P. detection; food; gene expression; plant; animal; microorganism; toxin; antibiotic; biopesticide; virulence factor; disease model; plague; luminescens is a model (particularly plague and whooping cough). This sequence represents one of the isolated P. luminescens proteins Genomic sequence of Photorhabdus luminescens and encoded polypeptides useful e.g. as therapeutic antimicrobials and agricultural pesticides Gaps Danchin A; . 0 78.6%; Score 33; DB 6; Length 171; 75.0%; Pred. No. 1.9e+02; ive 2; Mismatches 0; Indels Kunst F, Frangeul L, Klebsiella pneumoniae polypeptide segid 11512. Claim 2; SEQ ID NO 3162; 1205pp; French. ABO64995 standard; protein; 181 AA. Taourit S, Glaser P, RECH SCI 07-FEB-2001; 2001FR-00001659. 07-FEB-2002; 2002WO-IB003040. (first entry) 6; Conservative Photorhabdus luminescens. (CNRS) CNRS CENT NAT ||||||: |36 NKEKALLL 143 WPI; 2003-148459/14. 2 NKEKALII 9 Best Local Similarity Sequence 171 AA; WO200294867-A2. whooping cough. Duchaud E, Ta Buchrieser C; INSP) INST 29-JUL-2004 28-NOV-2002 AB064995; Query Match Matches RESULT 15 AB06499 ð 유

Recombinant expression vector; transcription regulatory element; Klebsiella pneumoniae protein; antibacterial; Vaccine.

Db 6 KNKAKALVI 14

1 KNKEKALII 9

ð

ö

0; Gaps

Query Match 78.6%; Score 33; DB 7; Length 181; Best Local Similarity 66.7%; Pred. No. 2e+02; Matches 6; Conservative 2; Mismatches 1; Indels

Search completed: December 6, 2004, 15:26:09 Job time : 122 secs

```
December 6, 2004, 15:19:38; Search time 27.5 Seconds (without alignments) 21.704 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                  478139
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                         478139 seqs, 66318000 residues
                                                                                OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                          BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                       US-10-042-202-17
                                                                                                                                                                                                                                              1 KNKEKALII 9
                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                               Perfect score:
                                                                                                                                                                                                                                                                                                                                                         Searched:
                                                                                                                                                                                                                                                     Sequence:
                                                                                                                       Run on:
                                                                                                                                                                                                         Title:
```

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0 Maximum DB seq length: 200000000

/cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:* Issued Patents AA:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	Sequence 8, Appli Sequence 14, Appli 20 Sequence 1640, Appli 240 Sequence 1505, A 68 Sequence 1705, A 68 Sequence 1705, A 512 Sequence 3558, A 512 Sequence 11512, A 512 Sequence 11512, A 513 Sequence 11512, A 56quence 5, Appli 56quence 5, Appli 56quence 6, Appli 56quence 1108, Appli 56quence 20, Appli 56quence 6570, Ap 56quence 1128, Appli 56quence 677, Appli 56quence 17, Appli
SUMMAR	US-09-454-204A-41 US-09-454-204A-41 US-08-313-28B-14 US-09-134-001C-5420 US-09-134-001C-5420 US-09-252-991A-17505 US-09-270-767-50585 US-09-134-001C-3452 US-09-134-001C-3452 US-09-134-001C-3452 US-09-134-001C-3452 US-09-134-001C-3452 US-09-134-001C-3452 US-09-134-515A-5 US-09-138-452A-128 US-09-138-452A-128 US-09-135-639-17 US-09-135-639-17 US-09-135-639-17 US-08-468-578-17 US-08-468-578-17 US-08-468-578-17 US-08-468-578-17 US-08-468-578-17 US-08-468-578-17 US-08-468-578-17 US-08-468-578-17 US-08-468-578-17 US-08-468-578-17 US-08-468-578-17 US-08-468-578-17
Length DB	1 1 2 2 2 2 2 2 2 4 1 1 2 2 2 2 2 2 2 2
% Query Match	10000 100000 100000 100000 100000 10000 10000 10000 10000 10000 10000 10000 100000 100000 10000 100000 100000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 100000 10000 10000 10000 10000 10000 10000 10000 10000 10000 100
Score	 -
Result No.	

ö

; Sequence 41, Application US/09454204A; Patent No. 6663871

US-09-454-204A-41

3 KNKEKALII 11

g

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: McMichael, Andrew
APPLICANT: Hill, Adrian V.S.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Schneider, Jorg

Sequence 4024, Ap Sequence 3710, Ap Sequence 1789, A Sequence 1589, A Sequence 15210, A Sequence 15210, A Sequence 17527, A Sequence 6, Appli Sequence 6, Appli Sequence 9, Appli Sequence 2, Ap	Sequence 42238, A
US-09-107-532A-4024 US-09-583:110-3710 US-09-446-083-11 US-09-248-796A-1586 US-09-107-53A-4220 US-09-107-53A-4220 US-09-107-53A-4220 US-09-108-45A-15310 US-09-248-796A-17527 US-09-248-796A-17527 US-09-248-796A-17527 US-09-270-76-57870	US-09-270-767-42238
ずずこせずずずせなるのです	4
11899 11889 11889 1390 1390 1390 1389 1389	371
	71.4
000000000000000000000000000000000000000	30
0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	45

ALIGNMENTS

```
Gaps
                                                          GENERAL INFUGRATION:

GENERAL INFUGRATION:

APPLICANT: Hill, Adrian V.S.

APPLICANT: Gilbert, Sarah C.

APPLICANT: Gilbert, Sarah C.

APPLICANT: Schneider, Jorg

APPLICANT: Plebanski, Magdalena

APPLICANT: Plebanski, Magdalena

APPLICANT: Hanke, Tomas

APPLICANT: Hanke, Tomas

APPLICANT: Blanchard, Tom

TITLE OF INVENTION: Methods and Reagents for Vaccination

TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response

FILE REFERENCE: 2907.1000-000

CURRENT APPLICATION NUMBER: US/09/454,204A

FILE REFERENCE: 1998-10-00

PRIOR APPLICATION NUMBER: GB 97 11957.2

PRIOR FILING DATE: 1998-06-09

PRIOR FILING DATE: 1997-06-09

NUMBER OF SEQ ID NOS: 78

SEQ ID NO 8

LENGTH: 11

LENGTH: 11

LENGTH: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 42; DB 4; Length 11; 100.0%; Pred. No. 0.043; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: CTL Epitope of the Malaria String
Sequence 8, Application US/09454204A Patent No. 6663871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100...
Perhen 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 KNKEKALII 9
                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-454-204A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
, ANTI-SENSE:
US-08-313-288B-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
               APPLICANT: Harke, Tomas
APPLICANT: Harke, Tomas
APPLICANT: Smith, Geoffrey L.
APPLICANT: Smith, Geoffrey L.
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
FILE REFRERENCE: 2907.1000-000
CURRENT APPLICATION NUMBER: US/09/454,204A
CURRENT FILING DATE: 1999-12-09
PRIOR PPLICATION NUMBER: PCT/GB98/01681
PRIOR APPLICATION NUMBER: PCT/GB98/01681
PRIOR APPLICATION NUMBER: GB 97 11957.2
PRIOR FILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 78
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 41
LENGTH: 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
100.0%; Score 42; DB 4; Length 229;
Best Local Similarity 100.0%; Pred. No. 0.9;
Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 14, Application US/08313288B

Patent No. 5750502

GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION: CLONING, EXPRESSION AND USES OF A

TITLE OF INVENTION: NOVEL SECRETED PROTEIN, F-SPONDIN

NUMBER OF SEQUENCES: 20

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham LLP

STREET: 1185 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/313,288B
FILING DATE: January 5, 1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISCHATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 40028-A-PCT-US
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPAX: (212) 278-0400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Complete Epitope of Malaria String
US-09-454-204A-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
  Plebanski, Magdalena
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 559 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 58 KNKEKALII 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 3
US-08-313-288B-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
```

```
Sequence 16240, Application US/09248796A

Sequence 16240, Application US/09248796A

Patent No. 6747137

GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: NUCLEIC ACID AND THERAPEUTICS
TITLE OF INVENTION: NUCLEIC ACID AND THERAPEUTICS
TITLE OF INVENTION: 107196.132
CURRENT FILING DATE: 1999-02-12
PRIOR PELICATION NUMBER: US 60/074,725
PRIOR PILING DATE: 1998-02-13
PRIOR FILING DATE: 1998-02-13
PRIOR FILING DATE: 1998-08-13
NUMBER OF SEQ ID NOS: 28208

SEQ ID NO 16240

LENGTH: 198
                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:

APPLICANT: Lynn Doucette-Stamm et al APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: WUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS TITLE OF INVENTION: BPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: GTC-007

CURRENT APPLICATION NUMBER: US 60/134,001C

CURRENT APPLICATION NUMBER: US 60/064,964

PRIOR FILING DATE: 1997-11-08

PRIOR FILING DATE: 1997-11-08

PRIOR FILING DATE: 1997-11-08

RECOURTED APPLICATION NUMBER: US 60/055,779

RECOURTED APPLICATION NUMBER: US 60/055,779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
100.0%; Score 42; DB 1; Length 559; 100.0%; Pred. No. 2.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81.0%; Score 34; DB 4; Length 198; 77.8%; Pred. No. 29; tive 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 35; DB 3; Length 227;
Pred. No. 21;
2; Mismatches 0; Indels
                                                   0; Mismatches
                                                                                                                                                                                                                                                                      Sequence 5420, Application US/09134001C Patent No. 6380370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ) ORGANISM: Staphylococcus epidermidis US-09-134-001C-5420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        83.3%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Candida albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 77.8
Matches 7; Conservative
                                                   9; Conservative
                                                                                                                                           109 KNKEKALII 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           59 KNKEKSAII 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 KNKEKALII 9
                                                                                                    1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||||||:
11 NKEKALVV 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 NKEKALII 9
  Query Match
Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-248-796A-16240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-248-796A-16240
                                                                                                                                                                                                                          RESULT 4
US-09-134-001C-5420
```

Gaps

ö

4; Length 299;

```
Sequence 3452, Application US/09134001C

Sequence 3452, Application US/09134001C

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: BUIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
TOWNERN FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR PILING DATE: 1997-11-08
PRIOR FILING DATE: 1997-11-08
PRIOR FILING DATE: 1997-10-08-14
NUMBER OF SEQ ID NOS: 5674
SEQ ID NO 3452
LENGTH: 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Gary Breton et. al
APPLICANT: Gary Breton et. al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.2004001
CURRENT APPLICATION NUMBER: US/09/489, 039A
CURRENT FILING DATE: 2000-01-27
FRICR APPLICATION NUMBER: US 60/117,747
PRIOR FILING DATE: 1999-01-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 78.6%; Score 33; DB 4; Length 181; Best Local Similarity 66.7%; Pred. No. 41; Matches 6; Conservative 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81.0%; Score 34; DB 3; 66.7%; Pred. No. 68;
                                                                                                                                                                                             Score 34; DB
Pred. No. 43;
                                                                                      FEATURE:
; OTHER INFORMATION: Xaa means any amino acid US-09-270-767-50585
                                                                                                                                                                                                                                             2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-489-039A-11512
; Sequence 11512, Application US/09489039A
; Patent No. 6610836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Staphylococcus epidermidis
                                              TYPE: PRT
ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-11512
                                                                                                                                                                                             81.0%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 14342
SEQ ID NO 11512
LENGTH: 181
                                                                                                                                                                                                                    Best Local Similarity 77.8
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 66.7
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                          ||:|:||||
142 KNQEQALII 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27 KNKEKVLLL 35
                                                                                                                                                                                                                                                                                              1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 9
US-09-134-001C-3452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-134-001C-3452
SEQ ID NO 50585
                                                                                                                                                                                               Query Match
                         LENGTH:
                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                              Sequence 17505, Application US/09252991A

Patent No. 6551795
GENERAL INFORMATION:
PAPLICATION:
MUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142

SEQ ID NO 17505

LENGTH: 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 35369, Application US/09270767

Parent No. 6703491

GENERAL INFORMATION:
APPLICANT: Homburse et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT PILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 35368
LENGTH: 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-270-767-50585

Sequence 50585, Application US/09270767

Sequence 50585, Application US/09270767

Sequence 50585, Application US/09270767

GENERAL INFORMATION:

APPLICANT: Homburger et al.

TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster

FILE REFERENCE: File Reference: 7326-094

CURRENT APPLICATION NUMBER: US/09/270,767

CURRENT FILING DATE: 1999-03-17

SOFTWARE: PALENTING DATE: 1999-03-17

SOFTWARE: PALENTIN OF 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 34; DB 4; Length 224;
Pred. No. 32;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 34; DB 4; Length 299;
Pred. No. 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Xaa means any amino acid US-09-270-767-35368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-17505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81.0%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81.0%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match
Best Local Similarity 77.0
Tr.0
Tr.0
Tr.0
Tr.0
Tr.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ||:|:||||
142 KNQEQALII 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  129 KNKQKALV 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 KNKEKALI 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                           US-09-252-991A-17505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-270-767-35368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

ö

Gaps

ö

ö

Gaps

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                             Sequence 7230, Application US/09107532A
Patent No. 6583275
GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       76.2%; Score 32; DB 4; Length 166; 66.7%; Pred. No. 59; ive 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
STREET: 100 Beaver Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998

PRIOR APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
REFERENCE/DOCKET NUMBER: 40,489
REGISTRATION NUMBER: 40,489
REGISTRATION NUMBER: 40,489
REGISTRATION NUMBER: 40,489
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ), NAME/KEY: misc_feature
; LOCATION: (B) LÖCATION 1...166
; SEQUENCE DESCRIPTION: SEQ ID NO: 7230:
US-09-107-532A-7230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Enterococcus faecium
                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 02354
COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
COMPUTER: PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM: <Unknown>SOFTWARE: ASCII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 5, Application US/08652877
Patent No. 6187548
GENERAL INFORMATION:
APPLICANT: AREstrom, Goran
APPLICANT: Juhlin, Claes
APPLICANT: Rask, Lars
APPLICANT: Crumley, Gregg R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 7230:
SEQUENCE CHARACTERISTICS:
LENGTH: 166 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (781)893-8277
                                                                                                                                                                                                                                                                                                                                                   CITY: Waltham
STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 66.7
Matches 6; Conservative
                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        33 KNKEEAFLI 41
||| |||::
KNKAKALVL 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 KNKEKALII 9
                                                                                        RESULT 11
US-09-107-532A-7230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
US-08-652-877-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                         셤
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Human Calcium Sensor Protein, Fragments TITLE OF INVENTION: Thereof and DNA Encoding Same NUMBER OF SEQUENCES: 84
CORRESPONDENCE ADDRESS:
ADDRESSEE: Martin Savitzky
APPLICANT: Morse, Clarence C.
APPLICANT: Murray, Edward M.
APPLICANT: Hialm, Goran
TITLE OF INVENTION: Human Calcium Sensor Protein, Fragments
TITLE OF INVENTION: Thereof and DNA Encoding Same
NUMBER OF SEQUENCES: 106
CORRESPONDENCE ADDRESS:
ADDRESSE: Rhone-Poulenc Rorer Inc.
STREET: 500 Arcola Rd., 3C43
CITY: Callegeville
CONTY: Callegeville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 3; Length 269;
96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 32; DB 3
Pred. No. 96;
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION: 435.
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/15203
FILING DATE: 22-NOV-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/344,836
FILING DATE: 33-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/487,314
FILING DATE: O'-JUNE-1995
ATTORNEY/AGENT INFORMATION:
NAME: SAVICZK, MARTÍN
REGISTRATION NUMBER: 29,699
REFERENCE/DOCKET NUMBER: 29,699
REFERENCE/DOCKET NUMBER: A1355B-US
TELEPHONE: 610-454-3806
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE: CHARACTERISTICS:
                                                                                                                                                                                                                                                    COUNTRY: USA
ZIP: 19426-0107
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Macintosh
OPERATING SYSTEM: System 7.5.1
SOFTWARE: Word 6.0 (Patentin)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/652,877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5, Application US/08476515A
Patent No. 6239270
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Akerstrom, Goran APPLICANT: Juhlin, Claes APPLICANT: Rask, Lars APPLICANT: Crumley, Gregg R. APPLICANT: Morse, Clarence C. APPLICANT: Murray, Edward M. APPLICANT: Hjalm, Goran
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      76.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 269 amino acids
TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 76.2
Best Local Similarity 55.6
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       :|||| |::
166 ENKEKVLVV 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-476-515A-5
                                                                                                                                                                                                                 CITY: C
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                    Sequence 7, Application US/08671757A
Patent No. 6476213
GENERAL INFORMATION:
APPLICANT: Suerbaum, Sebastian
TITLE OF INVENTION: Cloning and Characterization Production
of Aflagellate Strains
      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Washington
CITY: Washington
COUNTR: D.C.
COUNTR: D.C.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION NUMBER: US/08/671,757A
FILING DATE: 16-Aug-2001
CLASSIFICATION: CURKADATION:
ATTORNY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        76.2%; Score 32; DB 4; Length 732; 75.0%; Pred. No. 2.6e+02; ative 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Finnegan, Henderson, Farabow, Garrett
Dunner
      Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REFERENCE/DOCKET NUMBER: 02356.0073-00000
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 408-4400
TELEFRAX: (202) 408-4400
      ö
    2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Search completed: December 6, 2004, 15:32:10 Job time : 28.5 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 7:
                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 1300 I Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 732 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 75.0
Matches 6; Conservative
    6; Conservative
                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                   ||||:||:
417 NKEKSLIL 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ||||:|:|
503 KNKEEAII 510
                                           2 NKEKALII 9
                                                                                                                                                                   US-08-671-757A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-671-757A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ţ
    Matches
                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GERERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Keith Meinstock et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REPERENCE: 107196-132
CURRENT APPLICATION NUMBER: US 60/074,725
PRIOR APPLICATION NUMBER: US 60/074,725
PRIOR PELING DATE: 1998-02-13
PRIOR PELICATION NUMBER: US 60/096,409
PRIOR FILING DATE: 1998-08-13
NUMBER OF SEQ ID NOS: 28208
SEQ ID NO 18964
LENGTH: 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 32; DB 4; Length 439;
Pred. No. 1.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 32; DB 3; Length 269;
Pred. No. 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
Rhone-Poulenc Rorer Inc., 500 Arcola Rd.;
                                                                                           COMPUTER: USA

COMPUTER READABLE FORM:

MEDLUM TYPE: IPOppy disk

COMPUTER: Compaq PC

OPERATING SYSTEM: Windows 95

SOFTWARE: Word 7.0 (Patentin)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/476,515A

FILING DATE: 07-JUN-1995

CLASSIFICATION TA35

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/344,836

FILING DATE: 23-NOV-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: WO PCT/SE94/00483

FILING DATE: 24-MAY-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: SE 9301764-8

FILING DATE: 24-MAY-1993

ATPLING DATE: 24-MAY-1993

ATPLING DATE: 24-MAY-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18964, Application US/09248796A Patent No. 6747137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: A1355D
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-454-3816
TELEFACK: 610-454-3808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Savitzky, Martin
REGISTRATION NUMBER: 29,699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 610-454-3808
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 269 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         76.2%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Candida albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        :|||| |::
166 ENKEKVLVV 174
                                         Collegeville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                              USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
US-09-248-796A-18964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-248-796A-18964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-476-515A-5
                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT ORGANISM:
```

ઠે 셤

OLESON SHARING TON SHIP

```
GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
               Copyright
```

OM protein - protein search, using sw model

Run on:

6, 2004, 15:18:43; Search time 23.5 Seconds (without alignments) 36.849 Million cell updates/sec December

US-10-042-202-17 Title: Perfect score:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1 KNKEKALII 9

Sequence:

283416 segs, 96216763 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

PIR_79:* Database :

pirl:* pir2:* pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		•			SUMMERTES	
Result No.	Score		Length	DB	ΙD	Description
1	42	100.0	559	. ~	S04531	thrombospondin-re
7	42	100.0	574	~	A46283	sporozoite surface
e	38	90.5	177	N	AD1251	Ω
4	38	ö	177	N	S70846	w
2	37	88.1	497	~	A84956	뎥
9	36	85.7	468	7	F70406	conserved hypothet
7	35	83.3	174	7	D84676	hypothetical prote
œ	35	83.3	222	~	C97345	PP-loop superfamil
6	35	83.3	4919	7	T31105	hypothetical prote
10	34	81.0	216	~	837351	algF protein precu
11	34	81.0	216	7	A83201	alginate o-acetylt
12	34	81.0	350	~	D84994	A/G-specific adeni
13	33	78.6	154	~	S55630	hypothetical prote
14	33	78.6	320	7	F96570	unknown protein, 8
15	33	78.6	372	Т	S76448	translation releas
16	33	œ.	443	~	B99952	conserved hypothet
17	33	æ.	465	7	D84636	hypothetical prote
18	33	φ.	518	7	AD1731	hypothetical prote
19	33	78.6	698	7	AD2237	ATP-dependent DNA
20	33	78.6	1005	7	A64465	hypothetical prote
21	32	ė.	164	N	T47547	
22	32	76.2	232	~	T43754	
23	32	76.2	241	~	H81536	hypothetical prote
24	32	76.2	352	~	E64529	н
25	32	•	352	~	F71977	
26	32	76.2	356	Н	S55437	tion
27	32	76.2	356	~	G84121	peptide chain rele
28	32	76.2	359	~	72	chain
29	32	76.2	456	N	B72130	frame-shift with o

hypothetical prote flagellar biosynth flacellar biosynth	hypothetical prote hypothetical prote hypothetical prote	glycoprotein GP330 dominant autoantig hypothetical 527K	gp310 protein prec hypothetical prote hypothetical 14.5K	CPSD/CAPA conserve CPSD/CAPA conserve probable exported	hypothetical prote
T45607 A64650 E71937	B86492 H81540 E72003	A30363 S53457 S57908	T42737 B75117 JQ1539	F97276 E97274 AD1021	D91261
0 0 0	000	000	0 0 0	000	7
561 733 733	774 774 811	972 1650 4572	4660 114 126	227 227 229	229
777	76.2	444	7.00.00	0.00.00	60
76	2,20	2,2,6	7.50	7.5	7
3 2 2	35 33	32 32 32	32 31 31	337	31
30		36 37 38	39 440 11	4. 4. 4. 5. 6. 4.	45

ALIGNMENTS

```
thrombospondin-related protein TRAP - malaria parasite (Plasmodium falciparum)

N.Alternate names: thrombospondin-related anonymous protein
C.Species: Plasmodium falciparum
C.Species: Septial: N.R.S.; Jennings, M.W.; Harris, T.J.R.; Marsh, K.; Newbold, C.I.;
Nature 335, 79-82, 1988
A.Fitle: A highly conserved amino-acid sequence in thrombospondin, properdin and in prote
A.Reference number: S04531; MUID:88318952; PMID:3045563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: DNA
A;Residues: 1-559 <ROB>
A;Cross-references: UNIPROT:P16893; EMBL:X13022; NID:g9977; PID:g9978
F;240-287/Domain: thrombospondin type 1 repeat homology <THR1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 42; DB 2; Length 559; 100.0%; Pred. No. 1.3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
```

109 KNKEKALII 117

sporozoite surface protein 2 - malaria parasite (Plasmodium falciparum) (strain NF54) N;Alternate names: thrombospondin-related anonymous protein (TRAP) C;Species: Plasmodium falciparum C;Species: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004

C;Accession: A46283
R;Rogers, W.O.; Malik, A.; Mellouk, S.; Nakamura, K.; Rogers, M.D.; Szarfman, A.; Gordon, Proc. Nall. Acad. Sci. U.S.A. 89, 9176-9180, 1892
A;Title: Characterization of Plasmodium falciparum sporozoite surface protein 2.
A;Reference number: A46283; MUID:93028427; PMID:1409621

A; Status: preliminary; nucleic acid sequence not shown; translation not shown A; Molecule type: DNA A; Residues: 1-574 <ROG-A; Residues: 1-574 <ROG-A; Cross-references: UNIPROT: Q26020; GB: M94013; NID: g160690; PID: g160691 F; 240-287/Domain: thrombospondin type 1 repeat homology <THR1>

Gaps . 0 Query Match
100.0%; Score 42; DB 2; Length 574;
Best Local Similarity 100.0%; Pred. No. 1.3;
Matches 9; Conservative 0; Mismatches 0; Indels

ö

셤

ઠે

GSPDB:GN00144

```
A,Cross-references: GB:AP000398, CA,Experimental source: strain APS C,Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Gene: At2g27740
A;Map position: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Gene: aq 1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
F70406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 5
A84956
DDP-N-acetylmuramoylalanyl-D-glutamate-2,6-diamino-pimelate ligase (EC 6.3.2.13) [import C;Species: Buchnera sp.
C;Species: Buchnera sp.
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 03-Jun-2002
C;Accession: A84956
R;Shigenobu, S.; Watanabe, H.; Hattori, M.; Sakaki, Y.; Ishikawa, H.
Nature 407, 81-86, 2000
A;Title: Genome sequence of the endocellular bacterial symbiont of aphids Buchnera sp. A;Accession: A84956
A;Accession: A84956
A;Accession: A84956
A;Accession: A84956
A;Molecule type: DNA
                                                           modulates DNA topology [imported] - Listeria monocytogenes (strain EGD-e)
C;Species: Listeria monocytogenes
C;Species: Listeria monocytogenes
C;Species: Listeria monocytogenes
C;Species: Listeria monocytogenes
C;Species: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004
C;Accession: AD1231
R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bloecker, C; Domanguez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, H. D.; Jones, L.M.; Karst, U.
Science 294, 849-852, 2001
A;Authors: Kreft, J.; Kunh, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A.; Mah, Athoriese Kreft, J.; Kunh, M.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, A;Reference number: AB1077; MUD:21537279; PMID:11679669
A;Accession: AD1251
A;Accession: AD1251
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Status: preliminary
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-177 <SAN>
A;Cross-references: UNIPROT:Q48753; EMBL:U29951; NID:g1036787; PIDN:AAB50026.1; PID:g103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPROT:Q48753; GB:NC_003210; PIDN:CAC99490.1; PID:g16410841; GSPDB:A;Experimental source: strain EGD-e C;Genetics: A;Gene: lmo1412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Listeria monocytogenes
C;Date: 15-Feb-1997 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
C;Accession: S70846
R;Sanchez-Campillo, M.; Dramsi, S.; Gomez-Gomez, J.M.; Michel, E.; Dehoux, P.; Cossart, Mol. Microbiol. 18, 801-811, 1995
A;Title: Modulation of DNA topology by flaR, a new gene from Listeria monocytogenes.
A;Reference number: S70846; MUID:36422467; PMID:8825084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90.5%; Score 38; DB 2; Length 177; 88.9%; Pred. No. 2.7; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90.5%; Score 38; DB 2; Length 177; 88.9%; Pred. No. 2.7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            flaR protein - Listeria monocytogenes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 88.5
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KNKEKVLII 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KNKEKVLII 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A, Residues: 1-177 <GLA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Accession: S70846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A,Gene: flaR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

```
A;Residues: 1-46 - AQF>
A;Residues: 1-46 - AQF>
A;Cross_references: UNIRROT:067281; GB:AE000730; NID:g2983674; PIDN:AAC07253.1; PID:g2983
A;Experimental source: strain VF5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hypothetical protein At2927740 [imported] - Arabidopsis thaliana hypothetical protein At2927740 [imported] - Arabidopsis thaliana (G.Species: Arabidopsis thaliana (G.Species: Oz-Reb-2001 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004 [S.Bate: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004 [S.Bate: Oz-Bate: Oz-Bate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross-references: UNIPROT:Q9ZUX5; GB:AE002093; NID:g3860258; PIDN:AAC73026.1; GSPDB:GN(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Deckert, G.; Warren, P.V.; Gaasterland, T.; Young, W.G.; Lenox, A.L.; Graham, D.E.; Ove
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nature 392, 353-358, 1998
A,Title: The complete genome of the hyperthermophilic bacterium Aquifex aeolicus.
A,Reference number: A70300; MUID:98196666; PMID:9537320
A.Gene: murE; BU221
C.Superfamily: UDP-N-acetylmuramoylalanyl-D-glutamate-2,6-diaminopimelate ligase
C.Keywords: ligase
                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Accession: F70406
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 conserved hypothetical protein ad_1236 - Aquifex aeolicus
C;Species: Aquifex aeolicus
C;Date: 08-May-1998 #sequence_revision 08-May-1998 #text_change 09-Jul-2004
C;Accession: F70406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 35; DB 2; Length 174; Pred. No. 11; 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 36; DB 2; Length 468;
Pred. No. 18;
1; Mismatches 0; Indels
                                                                                                                                                                                         2; Length 497
                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                    88.9%; Score 37; DB 88.9%; Pred. No. 12; ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 66.7%;
Matches 6; Conservative 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 87.5%;
Matches 7; Conservative
                                                                                                                                                                                                   Query Match
Best Local Similarity 88.9
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         435 KNKEKILII 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    102 KNKEKALL 109
                                                                                                                                                                                                                                                                                                                                                                                             1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 KNKEKALI 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-174 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Status: preliminary
```

셤

```
C;Species: Pseudomonas aeruginosa
C;Date: 15-Sep-2000 #text_change 09-Jul-2004
C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 09-Jul-2004
C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 09-Jul-2004
C;Date: 15-Sep-2000 #sequence Levision 15-Sep-2000 #text_change 09-Jul-2004
A;Stocession, A3-3201
Astronomy, S.D.; Warrener, P.; Hickey, M.J.; Bri adman, S.J.; Vuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.; Lim, Nature 406, 559-964, 2000
A;Title: Complete genome sequence of Pseudomonas aeruginosa PA01, an opportunistic pathog A;Reference number: A82950; MUID: 20437337; PMID: 10984043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shigenobu, S.; Watanabe, H.; Hattori, M.; Sakaki, Y.; Ishikawa, H.

Marke 407, 81-86, 2000
Filtle: Genome sequence of the endocellular bacterial symbiont of aphids Buchnera sp. Af
Reference number: A84910; MUID:20445173; PMID:10993077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:006062; GB:AE004776; GB:AE004091; NID:g9949701; PIDN:AAG06938
A;Experimental source: strain PAO1
Cross-references: UNIPROT:Q06062; EMBL:L13026; NID:g294339; PIDN:AAD15231.1; PID:g29434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         alginate o-acetyltransferase AlgF PA3550 [imported] - Pseudomonas aeruginosa (strain PAO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Species: Buchnera sp.
Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 23-Mar-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'G-specific adenine glycosylase [imported] - Buchnera sp. (strain APS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                               2; Length 216;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 81.0%; Score 34; DB 2; Length 216; Best Local Similarity 75.0%; Pred. No. 21; Matches 6; Conservative 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 34; DB 2; Length 350;
Pred. No. 34;
1; Mismatches 0; Indels
                                                                                                                                                                                     A)Gene: algF
C;Superfamily: Pseudomonas aeruginosa algF protein
F;1-28/Domain: signal sequence #status predicted <SIG>
F;29-216/Product: algF protein #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gene: algF; PA1550
Superfamily: Pseudomonas aeruginosa algF protein
                                                                                                                                                                                                                                                                                                                                                                           81.0%; Score 34; DB 75.0%; Pred. No. 21; cive 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gene: muty; BU552; Superfamily: A/G-specific adenine glycosylase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GSPDB:GN00144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cross-references: GB:AP000398; (Experimental source: strain APS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81.0%;
ilarity 87.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 75.0°
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 KNKOKALV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 KNKOKALV 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
7; Conserve
                              A; Accession: $38858
A; Molecule type: protein
A; Residues: 29-39 <SHI2>
C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 KNKEKALI 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 KNKEKALI 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-350 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Residues: 1-216 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Status: preliminary; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Accession: D84994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Accession: A83201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Accession: D84994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    а
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                        RESULT 8
P9-1049
P9-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   algF protein precursor - Pseudomonas aeruginosa
C;Species: Pseudomonas aeruginosa
C;Accession: 337351, 838858
R;Shinabarger, D; May, T.B.; Boyd, A.; Ghosh, M.; Chakrabarty, A.M.
Mol. Microbiol. 9, 1027-1035, 1993
A;Title: Nuclectide sequence and expression of the Pseudomonas aeruginosa algF gene cont
A;Reference number: 837351; MUID:95020624; PMID:7934909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A Status: preliminary; translated from GB/EMBL/DDBJ
Andlecule type: DNA
A;Residues: 1-4919 «WAR»
A;Cross-references: UNIPROT: Q9ZHLO; EMBL: APO57696; NID: G3929021; PID: G3929023; PIDN: AAC7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hypothetical protein 2 - Haemophilus ducreyi
C;Species: Haemophilus ducreyi
C;Species: Haemophilus ducreyi
C;Date: 22-Oct-1999 #sequence_revision 22-Oct-1999 #text_change 09-Jul-2004
C;Accession: T31105
R;Ward, C.K.; Lumbley, S.R.; Latimer, J.L.; Cope, L.D.; Hansen, E.J.
J. Bacteriol. 180, 6013-6022, 1998
A;Title: Haemophilus ducreyi secretes a filamentous hemagglutinin-like protein.
A;Reference number: 220984; MUID:99030326; PMID:9811662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       83.3%; Score 35; DB 2; Length 4919;
87.5%; Pred. No. 2.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 222;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C,Genetics:
A,Gene: CAC3627
C,Superfamily: conserved hypothetical protein HI1191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 35; DB
Pred. No. 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 75.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 87.5
les 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            700 NKEKALIL 707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ||||||||::
6 NKEKALW 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 NKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 NKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Accession: S37351
A;Molecule type: DNA
A;Residues: 1-216 <SHI1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A, Accession: C97345
A, Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Gene: lspA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
```

ઠે d g

ð

ö

```
A) Residues: 1-372 cKAN>
A) Cross-references: UNIPROT:P74476; EMBL:D90915; GB:AB001339; NID:g1653604
A) Cross-references: UNIPROT:P74476; EMBL:D90915; GB:ABL Data Library, June 1996
C) Comment: This is one of two codon-specific peptide-chain-release factors that are respond codons uGA and UAA.

C) Comment: The gene coding for this protein (RF-2) contains a UGA in-frame termination of ation of RF-2. This provides a mechanism for the protein to regulate its own production.
      C;Date::25-Apr-1997 #sequence_revision 06-Jun-1997 #text_change 09-Jul-2004
C;Accession: 876448
C;Accession: 876448
R;Kancko, T.; Sato, S.; Kotani, H.; Tanaka, A.; Asamizu, E.; Nakamura, Y.; Miyajima, N.;
R;Kancko, T.; Sato, S.; Shimpo, S.; Takeuchi, C.; Wada, T.; Watanabe, A.; Yamada, M.; Yasuda, DNA Res. 3, 109-136, 1996
A;Title: Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis
                                                                                                                                                                                                                                          A;Reference number: S74322; MUID:97061201; PMID:8905231
A;Accession: S76448
A;Status: nucleic acid sequence not shown; translation not shown
A;Molegule type: DWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A,Gene: prfB
S.Superfamily: translation releasing factor
C,Keywords: protein biosynthesis; translational frameshift
F,26-27/Region: plus-one translational frameshift
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6, 2004, 15:31:10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 77.8%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Search completed: December
Job time: 24.5 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :|||||| |
284 QNKEKALAI 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 KNKEKALII 9
A; Variety: PCC 6803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14

F96570

unknown protein, 80333-82175 [imported] - Arabidopsis thaliana

C, Species: Arabidopsis thaliana (mouse-ear cress)

C, Species: Arabidopsis thaliana (mouse-ear cress)

C, Species: Arabidopsis thaliana (mouse-ear cress)

C, Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 09-Jul-2004

C, Accession: F96570

R; Theologis, A.; Ecker, J. B.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso, Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.; ansen, N.F.; Hughes, B.; Huizar, L.

Nature 409, 816-820, 2000

A; Authors: Hunter, J.L.; Jankins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, B.; Kim, C.C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marziali, Rizzo, M.; Roonsy, T.; Sowley, D.; Sakano, H.

Rizzo, M.; Roonsy, T.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.

A; Reference number a86141; MUID:21016719; PMID:11130712

A; Accession: F96570

A; Status: preliminary

A; Residues: 1-320 <STO.

A; Cross-references: UNIPROT:090228; GB:AE005173; NID:g6862953; PIDN:AAF30341.1; GSPDB:GN

C, Generics: F14.224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Gross-references: UNIPROT:066639; GB:U20824; NID:g695172; PIDN:AAC13823.1; PID:g695208
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, February 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                               C;Accession: S55630

R;Teliford, B.A.R.; Watson, M.S.; Aird, H.C.; Perry, J.; Davison, A.J.

R,Teliford, B.A.R.; Watson, M.S.; Aird, H.C.; Perry, J.; Davison, A.J.

J. Mol. Biol. 249, 520-528, 1995

A;Title: The DNA sequence of equine herpesvirus 2.

A;Reference number: S55594; MUID:95302501; PMID:7783207

A;Accession: S55630

A;Accession: S55630

A;Reference not shown; translation not shown A;Residues: 1-154 <TEL>

A;Residues: 1-154 <TEL>
                                                                                                                                                                                                                                                 S55300
hypothetical protein 35 - equine herpesvirus 2
C.Species: equine herpesvirus 2
C.Spate: 27-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  translation releasing factor RF-2 - Synechocystis sp. (strain PCC 6803)
N;Alternate names: peptide chain release factor 2
C;Species: Synechocystis sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     78.6%; Score 33; DB 2; Length 154; 75.0%; Pred. No. 24; cive 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         78.6%; Score 33; DB 2; Length 320;
75.0%; Pred. No. 49;
iive 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Superfamily: probable membrane protein YOLO77c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 75.0°
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6; Conservative
                                                                                                        265 KNKEEALI 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54 KNKEKVLV 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ||||:||:
77 KNKERALL 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 KNKEKALI 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 KNKEKALI 8
                                         1 KNKEKALI 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best_Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A,Gene: F14G24.20
A,Map position: 1
C,Superfamily: pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                        g
                                                ઢ
```

Gaps

ö

Length 372; 1; Indels

Score 33; DB 1; Pred. No. 57; 1; Mismatches

Run on:

```
{1}
SEQUENCE FROM N.A.
STRAIN=DK3-16;
Mamillapalli A., Joshi H., Malhotra P.;
                                                                                          AAQ11892
AAQ11893
AAQ11894
AAQ11895
                                                                                                                                                                                                                                     Created)
                                                                                AAQ11891
09TYCS
09TYC6
09TYC7
09TYD0
09TYD1
09TYD1
                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                  001510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-MAR-2004 (TrEMBLrel. 27, 02-MAR-2004 (TrEMBLrel. 27, 02-MAR-2004 (TrEMBLrel. 27,
                                                                                                                                                                                                                                   05-JUL-2004 (TrEMBLrel. 27, 05-JUL-2004 (TrEMBLrel. 27, 05-JUL-2004 (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS50092; TSP1; 1. PROSITE; PS50234; VWFA; 1. NON TER 327 327 SEQUENCE 327 AA; 37251 N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                 PRELIMINARY;
  Trap protein (Fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        105 KNKEKALII 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 KNKEKALII 9
 CAE46498
CAE46498;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                            Q70GJ7;
                                                                                                                                                                                                                 070637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 2
CAE46498
                                                                                                                                                                                              RESULT 1
  \frac{33}{4}
                                                                                                                                                                                                       070GJ
                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   070ge3 plasmodium 070gi8 plasmodium 070gk2 plasmodium 070gk2 plasmodium 070gk3 plasmodium 07619 plasmodium 07611 plasmodium 07610 plasmodium 07610 plasmodium 07610 plasmodium 071509 plasmodium 071509 plasmodium 071509 plasmodium 071509 plasmodium 071509 plasmodium 071509 plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                Q70gj7 plasmodium
Cae46498 plasmodiu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   plasmodium
plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q01509 plasmodium
Q717t6 plasmodium
Q717t7 plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q717t9 plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     lasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          plasmodium
                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                  December 6, 2004, 15:17:52 ; Search time 125.5 Seconds (without alignments) 41.262 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                               Description
                    Compugen Ltd.
          GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compug
                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                   1825181 segs, 575374646 residues
                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                          CAB46498
C70GE3
C70GE3
C70GC3
C70GK3
C70GK3
CAB46492
CAB46493
CAB46497
CAB46626
                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                   OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          076118
Q01502
Q01503
                                                                                                                                                     BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q01506
Q01508
Q01509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q9TYC2
Q9TYC3
Q9TYC4
                                                                                                                                                                                                                                                                                                                                                                                                                                 270GJ7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        076111
                                                                                                                                                                                                                                                                                                 UniProt_02:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                             US-10-042-202-17
                                                                                                                                                                                                                                                                                                                                                                                                  Query
Match Length DB
                                                                                                                                1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0
                                                                                                                                                      Scoring table:
                                                                                                                         Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24
                                                                                                                                  Sequence:
                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                  Database
```

Result Š

```
ö
              09tyc6 plasmodium
09tyc7 plasmodium
09tyc8 plasmodium
09tyd0 plasmodium
09tyd1 plasmodium
09tyd2 plasmodium
09tw7 plasmodium
Aaq11891 plasmodium
Aaq11895 plasmodiu
Aaq11895 plasmodiu
Aaq11895 plasmodiu
plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Trap protein (Fragment).

Name=trap;
Plasmodium falciparum.

Bukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.

NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Plasmodium falciparum.
Eukaryota, Alveolata, Apicomplexa, Haemosporida, Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mamillapalli A., Joshi H., Malhotra P.;
Mamillapalli A., Joshi H., Malhotra P.;
Submitted (Aug-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AJSA1771; CAR£46498.1; -.
InterPro; IPR000884; TSP1.
InterPro; IPR00095; VWFA.
Pfam; PF00092; VWA-1.
Pfam; PF00092; VWA-1.
Pfam; PF00929; YWA-1.
SMART; SM00209; TSP1:
SWART; SM00209; TSP1:
SWART; SM00209; TSP1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       327 AA; 37251 MW; 881D7A4B4EDD235A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           / Match 100.0%; Score 42; DB 2; Local Similarity 100.0%; Pred. No. 4.9; Nes 9; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        327 AA
                                                                                                                                                                                                                                                                                                                                                                                                                          327 AA
                                                                                                                                                                                                                                                                                                                         ALIGNMENTS
```

Gaps

ö

RT RT SO ET SO

```
Plasmodium falciparum.
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Name=trap;
Plasmodini Alveolata; Apicomplexa; Haemosporida; Plasmodium.
Bukaryota, Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBL_TaxID=5833;
                                                                                                                                                                                                  100.0%; Score 42; DB 2; Length 331; 100.0%; Pred. No. 5; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Score 42; DB 2; Length 331;
; Pred. No. 5;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SUBMILLADALLI A., Joshi H., Malhotra P.;

Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.

EMBL; AJ581765; CAE46493.1; -.

InterPro; IPR002084; TSP1.

InterPro; IPR002035; VWF.A.

Pfam; PF00090; TSP_1; 1.

Pfam; PF00092; VWA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mamillapalli A., Joshi H., Malhotra P.;
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        331 AA; 37609 MW; 2FE4EB47F1963D76 CRC64;
                                                                                                                                                              331 AA; 37521 MW; CBD1823A0C8C49EB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          331 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                  331 AA
Pfam; PF00090; TSP_1; 1.
Pfam; PF00092; VWA; 1.
PRINTS; PR00453; VWFADOMAIN.
SWART; SM00209; TSP1; 1.
SWART; SM00327; VWA; 1.
PROSITE; PS50092; TSP1; 1.
PROSITE; PS50234; VWFA; 1.
NOW TER 331 331
SEQUENCE 331 AA; 37521 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRINTS; PR00453; VWFADDMAIN.
SMART; SM00209; TSP1; 1.
SMART; SM00327; VWA; 1.
PROSITE; PS50092; TSP1; 1.
PROSITE; PS50234; VWFA; 1.
NON TER 331 331
SEQUENCE 331 AA; 37609 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match .
Query Match .
Best Local Similarity 100.vv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                             Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Trap protein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Trap protein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         109 KNKEKALII 117
                                                                                                                                                                                                                                                                                                                                 109 KNKEKALII 117
                                                                                                                                                                                                                                                                                       1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q70GK2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q70GK3
                                                                                                                                                                                                                                                                                                                                                                                                                                  Q70GK2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           270GK3
                                                                                                                                                                                                                                                                                                                                                                                                                 270GK2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S T R R R R R F S
                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                          ö
                                                                                                                                                                                          Gaps
  "Polymorphism in TRAP N-terminal region of Plasmodium falciparum in
                                                                                                                                                                                          ö
                                                                                                                                               100.0%; Score 42; DB 2; Length 327; 100.0%; Pred. No. 4.9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 42; DB 2; Length 331; 100.0%; Pred. No. 5; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium
YCBL_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A Mamillapalli A., Joshi H., Malhotra P.;
A Mamillapalli A., Joshi H., Malhotra P.;
L Submitted (SEP-2003) to the EMBL/GenBank/DDBJ databases.
EMBL, AJ582081; CAE46656.1; -.
R InterPro; IPR000884; TSP1.
R InterPro; IPR0002035; VWF.A.
R Pfam; PF00090; TSP2 1; 1.
R Pfam; PF00090; TSP2 1; 1.
R RANAT; SM00209; TSP1; 1.
R SMART; SM00307; VWA; 1.
R RSOSITE; PS50032; TSP1; 1.
R PROSITE; PS50034; VWA; 1.
R ROSITE; PS50234; VWA; 1.
R PROSITE; PS50234; VWA; 1.
R PROSITE; PS50234; VWA; 1.
R PROSITE; PS50234; VWA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SECURNCE FROM N.A.

Mamillapalli A., Joshi H., Malhotra P.;

Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.

EMBL; AJS81770; CAE46497.1; -.

INTERPROT IPRO0884; TSP1.

InterPro; IPR002035; VWF_A.
                       NON TER 327 327 325
SEQÜENCE 327 AA; 37251 MW; 881D7A4B4EDD235A CRC64;
                                                                                                                                                                                                                                                                                                                                                                       Q70GE3 PRELIMINARY; PRT; 331 AA. Q70GE3; Q70GE3; C5-JUL-2004 (TrEMBLrel. 27, Last sequence update) 05-JUL-2004 (TrEMBLrel. 27, Last sequence update) 05-JUL-2004 (TrEMBLrel. 27, Last annotation update) Trombospondin-related protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Trap protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT; 331 AA.
                                                                                                                                                                                          0; Mismatches
                                                                                                                              Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  109 KNKEKALII 117
                                                                                                                                                                                                                                                                      105 KNKEKALII 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .asmodium falciparum.
                                                                                                                                                                                                                                  1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=trap;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q70GJ8
Q70GJ8;
```

RESULT 3

10 00683

10 07006

AC 07006

DT 05-49

DT 05-49

DT 05-49

DE TROWN

CO NAME

RAP MARN

RAP MAR

엄

ð

RESULT 4 Q70GJ8

g

ò

Zaarrocoreasarc

Gaps

ö

```
STRAIN=PP3-12;
Mamillapalli A., Joshi H., Malhotra P.;
Mamillapalli A., Joshi H., Malhotra P.;
"Polymorphism in TRAP N-terminal region of Plasmodium falciparum in Indian isolates.";
Submitted (SEP-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ582081; CAE46626.1; -... nlDDC/GAIRBAND4D25 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=CM3-56;
Mamillapalli A., Joshi H., Malhotra P.;
"Polymorphism in TRAP-N terminal region of Plasmodium falciparum in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 42; DB 2; Length 331; Best Local Similarity 100.0%; Pred. No. 5; Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 42; DB 2; Length 331; 100.0%; Pred. No. 5; Live 0; Mismatches 0; Indels
                                                                                                                     Length 331;
                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indian isolates.";
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AJS81770; CAS6197.1; -.
NON TER 331 331
                                                          SEQUENCE 331 AA; 37609 MW; 2FE4EB47F1963D76 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NON TER 331 331 8352 MW; CBD1823A0C8C49EB CRC64; SEQUENCE 331 AA; 37521 MW; CBD1823A0C8C49EB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NON TER 331 331
SEQUENCE 331 AA, 37559 MW, BIBFCC03B8BD4D25 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-WAR-2004 (TrEMBLrel. 27, Created)
02-WAR-2004 (TrEMBLrel. 27, Last sequence update)
02-WAR-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-MAR-2004 (TrEMBLrel. 27, Created)
02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
Trombospondin-related protein (Fragment).
                                                                                                                        DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     331 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    331 AA
                                                                                                                     100.0%; Score 42; DE 100.0%; Pred. No. 5; tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
EMBL; AJ581765; CAE46493.1; -.
                                                                                                                     Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Trap protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                109 KNKEKALII 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   109 KNKEKALII 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Plasmodium falciparum.
                                                                                                                                                                                                                                           1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAE46497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAE46626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAE46626
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAE46497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                  NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 10
CAE46626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                       CAE46497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STA
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=RM3-51;
Mamillapalli A., Joshi H., Malhotra P.;
"Polymorphism in TRAP-N terminal region of Plasmodium falciparum in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN=RM3-21;
Mamillapalli A., Joshi H., Malhotra P.;
"Polymorphism in TRAP-N terminal region of Plasmodium falciparum in
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Plasmodium falciparum.
Eukaryota, Alveolata, Apicomplexa, Haemosporida, Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 42; DB 2; Length 331; 100.0%; Pred. No. 5; vative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 42; DB 2; Length 331; 100.0%; Pred. No. 5; ive 0; Mismatches 0; Indels
                        INCEPTO: IPRO00884; TSP1.
INCEPTO: IPRO00084; TSP1.
INCEPTO: IPRO00015; VWF_A.
Pfam; PF00002; VWA; 1.
PRINTS; PR00453; VWFA; 1.
SWART; SM00209; TSP1; 1.
PROSITE; PS50092; TSP1; 1.
PROSITE; PS50092; TSP1; 1.
PROSITE; PS50234; VWFA; 1.
NON TER 331 AA; 37625 MW; 4258443729D48835 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indian isolates.";
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ581764; CAE46492.1; -.
NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indian isolates.";
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        331 331
331 AA; 37625 MW; 4258443729D48835 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-MAR-2004 (TrEMBLrel. 27, Created)
C2-MAR-2004 (TrEMBLrel. 27, Last sequence update)
02-MAR-2004 (TrEMBLrel. 27, Last annotation update)
Trap protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               331 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              331 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-MAR-2004 (TrEMBLrel. 27, 02-MAR-2004 (TrEMBLrel. 27, 02-MAR-2004 (TrEMBLrel. 27,
      EMBL; AJ581764; CAE46492.1;
                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity luv...

Post Local 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Trap protein (Fragment). TRAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100 es 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  109 KNKEKALII 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          109 KNKEKALII 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAE46492
CAE46492;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAE46493
CAE46493;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 7
CAE46492
ID CAE4
AC CAE4
DT 02-M
DT 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAE46493

CAE4

AC CAE4

DT C2-M

DT 02-M

DT 02-M

DT 02-M

DE Trapp

GN TRAP

GN NCBI

RN (1)

RN (1)

RR SEQU

RA Mami

RT TOUSH

RT SUDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
   S T T D R R D R R D R R D R R D R R D R R D R R D R R D R R D R R D R R D R R D R R D R R D R R D R R D R R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D R D 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

ö

Gaps

ö

ö

Gaps

ó

P16893;

```
Jongwattiwes S., Putaporntip C., Kanbara H., Tanabe K.;
Jongwattiwes S., Putaporntip C., Kanbara H., Tanabe K.;
"Variation in the thrombospondin-related adhesive protein (TRAP) gene
of Plasmodium Falciparum from Thai field isolates.";
Mol. Biochem. Parasitol. 92:349-353 (1998).
EMBL; AB006331; BAA31167.1; -.
InterPro; IPR00084; TSP1.
InterPro; IPR0002035; VWP_A.
Pfam; PF00092; VWA, 1.
SMART; SM00209; TSP1; 1.
PROSITE; PS50092; TSP1; 1.
PROSITE; PS50092; TSP1; 1.
PROSITE; PS50092; TSP1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE=98119420; PubMed=9657338;
MEDLINE=98119420; PubMed=9657338;
MEDLINE=98119420; PubMed=9657338;
Jongwuttiwes S., Putaporntip C., Kanbara H., Tanabe K.;
Variation in the thrombospondin-related adhesive protein (TRAP) gene of Plasmodium falciparum from Thai field isolates.";
Mol. Biochem. Parasitol. 92:349-353 (1998).
InterPro; IPR000884; TSP1.
InterPro; IPR002035; WP-A.
Pfam: PF00099; VWP, 1.
Perm: PF00099; VWA, 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                    Bukaryota, Alveolata, Apicomplexa, Haemosporida, Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 42; DB 2; Length 559; 100.0%; Pred. No. 8.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           559 AA; 63409 MW; 9FAD7D0842DDB3EF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63304 MW; DA2AC97D8EEB1324 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                              Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                      559 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Thrombospondin-related protein (Fragment). Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                Thrombospondin-related protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 42;
                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE=98319420; PubMed=9657338;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                 (TrEMBLrel. 08, 1 (TrEMBLrel. 08, 1 (TrEMBLrel. 20, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00209; TSP1; 1.
SMART; SM00327; VWA; 1.
PROSITE; PS5029; TSP1; 1.
PROSITE; PS50234; VWFA; 1.
NON TER 559 559
SRQÜENCE 559 AA; 63304 MY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                109 KNKEKALII 117
109 KNKEKALII 117
                                                                                                                                                                                                                                                                                                                                                 Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                  01-NOV-1998
01-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          076111
                                                                                                                                                      076109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 13
                                                                                        RESULT 12
                                                                                                                            076109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            276111
                                                                                                                                                                                                                       PDT TO DE LA STATE LA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Potential.
Thrombospondin related anonymous protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=88318952; PubMed=3045563; Robson K.J.H., Hall J.R.S., Jennings M.W., Harris T.J.R., Marsh K., Newbold C.I., Tate V.E., Weatherall D.J.; "A highly conserved amino-acid sequence in thrombospondin, properdin and in proteins from sporozoites and blood stages of a human malaria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antigen; Cell adhesion; Glycoprotein; Malaria; Signal; Transmembrane.
SIGNAL 1 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nature 335:79-82(1988).
-!- DEVELOPMENTAL STAGE: Expressed during erythrocytic stage of life
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TSP type-1.
Cell attachment site.
Isoglutamyl lysine isopeptide (Gln-Lys) (interchain with K-? in Factor 3(A))
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Isoglutamyl lysine isopeptide (Gln-Lys) (interchain with K-? in Factor 3(A))
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-linked (GlonAc. .) (Potential)
N-linked (GlonAc. .) (Potential)
N-linked (GlonAc. .) (Potential)
N-linked (GlonAc. .) (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                                                                                                                                                                                                                       Plasmodium falciparum.
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 42; DB 1; Length 559; llarity 100.0%; Pred. No. 8.4; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02A20164D198C37A CRC64;
                                                                                                                                                                                                                                                     01-AVG-1990 (Rel. 15, Created)
1-AVG-1990 (Rel. 15, Last sequence update)
01-CCT-2004 (Rel. 45, Last annotation update)
Thrombospondin related anonymous protein precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- SIMILARITY: Contains 1 TSP type-1 domain.
-!- SIMILARITY: Contains 1 VWFA domain.
                                                                                                                                                                                       559 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63300 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PIR, S04531, S04531.
InterPro; IPR000884; TSP1.
InterPro; IPR002083; VWF-A.
Pfam; PP00009; TSP_1; 1.
Pfam; PP00092; VWA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRINTS; PRO0453; VWFADOMAIN.
SMART; SM00209; TSP1; 1.
SMART; SM00327; VWA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; X13022; CAA31440.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS50092; TSP1; 1.
PROSITE; PS50234; VWFA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  132
310
460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      78
||||||||||
KNKEKALII 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               132
310
3460
460
468
559 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
9; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KNKEKALII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                         TRAP_PLAFA
ID TRAP_PLAFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CARBOHYD
CARBOHYD
CARBOHYD
CARBOHYD
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 9
                             109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CROSSLNK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               parasite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CROSSLNK
```

DOMAIN DOMAIN SITE CHAIN

ö

Gaps

ö

Length 559;

```
PROSITE; PS50234; VWFA; 1.
                                         NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ***
        PT
SQ
                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE=98319420; PubMed=9657338;
MEDLINE=98319420; PubMed=9657338;
Jongwutiwes S., Puraporntip C., Kanbara H., Tanabe K.;
Jongwutiwes S., Puraporntip C., Kanbara H., Tanabe K.;
Variation in the thrombospondin-related adhesive protein (TRAP) gene
of Plasmodium falciparum from Thai field isolates.";
Mol. Biochem. Parasitol. 92:349-353(1998).
EMBL; AB006336; BAA31172.1;
InterPro; IPR0002035; VWF_A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Jongwutiwes S., Putaporntip C., Kanbara H., Tanabe K.,

"Variation in the thrombospondin-related adhesive protein (TRAP) gene
of Plasmodium falciparum from Thai field isolates.";

MOI. Biochem. Parasitol. 92:349-353(1998).

EMBL, AB006335; BAA31171.1;

InterPro; IPR000884; TSP1.

InterPro; IPR0002035; VWF_A.

Pfam; PP00099; TSP 1; 1.

Pfam; PP00099; VWA.
                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ul-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Thrombospondin-related protein (Fragment).
Plasmodium falciparum.
Bukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TAXID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Plasmodium falciparum.
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=5833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2; Length 559;
                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               559 AA; 63333 MW; C735C8A317C872B1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ou-NOV-1998 (TrEMBLrel. 08, Last sequence update) 01-MAR-2002 (TrEMBLrel. 20, Last annotation update) Thrombospondin-related protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; bcc...
100.0%; Pred. No. o...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 42; DB 3
Pred. No. 8.4;
    Pred. No. 8.4;
                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last seq
01-MAR-2002 (TrEMBLrel. 20, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE=98319420; PubMed=9657338;
                                             ;
Best Local Similarity 100.0%;
Matches 9; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1998 (TrEMBLrel. 08, 01-NOV-1998 (TrEMBLrel. 08, 01-MAR-2002 (TrEMBLrel. 20,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pfam; PF00090; TSP_1; 1.—
Pfam; PF00092; VWA; 1.
SMART; SM00209; TSP1; 1.
SMART; SM00327; VWA; 1.
PROSITE; PSS0092; TSP1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMART; SM00209; TSP1; 1.
SMART; SM00327; VWA; 1.
PROSITE; PS50092; TSP1; 1
PROSITE; PS50234; VWFA; 1
                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                             109 KNKEKALII 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            109 KNKEKALII 117
                                                                                                                   1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NON TER
SEQÜENCE
                                                                                                                                                                                                                                                                                                             RESULT 14
O76112
AC O76112;
DT 01-NOV-1)
DT 01-NOV-1
DT 01-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
7076113
AC 076113;
DT 01-NOV-1)
DT 01-MAR-2
DE Thrombos
OC BURARYOCH
OX NCBI_Tay
RN [1]
RN [1]
RN [1]
RN GOUGHC
RX MEDLINE-
RA JONGWULL
RA JONGWULL
RA TO PLASH
RT "VARIALIA
RY "VARIALIA
RY "NEBL; MR
RY "VARIALIA
RY "NEBL; MR
RY "
                                                                                                                       ઠે
                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
```

```
THE NOW TERM 1553, 1550, 1500.04; SOCRE 43, DB 2; Length 559; Ouery Match 100.04; Socre 43, DB 2; Length 559; Dest Local Similarity 100.04; Pred. No. 8 4; Oil Indels 0; Gaps 0; Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Oy 1 NOWESCALII 117

Search completed: December 6, 2004, 15:30:15

Job time : 125.5 secs
```

INIS PAGE BLANK (USPIO)

Sequence 16611, A Sequence 340, App Sequence 1061, App Sequence 1081, A Sequence 228418, Sequence 4774, App Sequence 4774, App Sequence 283479, Sequence 11287, A Sequence 581479, Sequence 7164, App Sequence 7167, App Sequence 7168, App Seque

1005 1005 1137 1137 1238 1352 3352 3553 3553 3553 3553

7 US-10-686-943-41
6 US-10-437-963-105530
G US-10-437-963-105530
3 US-10-042-202-16
4 US-10-360-836-18
6 US-10-70-202-16
7 US-10-425-115-258789
7 US-10-425-114-57534
7 US-10-425-115-193760
7 US-10-425-115-193760
7 US-10-425-115-193760
7 US-10-424-599-191816
8 US-10-424-599-207348
4 US-10-369-493-1061
7 US-10-369-493-1061
8 US-10-369-493-1061
9 US-10-389-977-4774
9 US-10-389-977-4776
9 US-10-389-977-4776
9 US-10-389-977-4776
9 US-10-389-977-4777
9 US-10-389-977-4776
9 US-10-389-977-7166
9 US-10-282-122A-58614
9 US-10-282-122A-58614
9 US-10-282-122A-58614
9 US-10-282-122A-58557
9 US-10-282-122A-58557
9 US-10-282-122A-51760
9 US-10-282-122A-51760
9 US-10-282-122A-51760
9 US-10-282-122A-51760

Sequence 45406, A Sequence 52257, A Sequence 51760, A

Sequence 198244

Sequence 57534, A Sequence 65246, A Sequence 193760, Sequence 19186, Sequence 795, App Sequence 207348,

Sequence 16, Appl Sequence 18, Appl

Sequence

Sequence Seguence

```
Sequence 17, Application US/10042202
Publication No. US20020136733A1
GENERAL INFORMATION:
APPLICANT: Addian Vivian Sinton HILL, Michael AIDOO,
Catherine Elizabeth Margaret ALLSOPP, Ajit LALVANI, Magdalena PLEBANSKI, Hilton Carter WHITTLE,
TITLE OF INVENTION: MALARIA PEPTIDES
NUMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:
ADDRESSEE: WENDEROYH, LIND & PONACK, L.L.P.
STREET: 2033 K Street, N.W., Suite 800,
CITY: Washington
STATE: D.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTEY: U.S.A.

COMPUTER READBLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

APPLICATION NUMBER: US/10/042,202

FILING DATE: 11-Jan-2002

RILING DATE: 28-JAN-1997

APPLICATION NUMBER: WO PCT/GB95/26982

FILING DATE: 30-MRR-1994

ATTONNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Warren M Cheek, Jr.
REGISTRATION NUMBER: 33,367
REFERENCE/DOCKET NUMBER: 2002_0026
US-10-042-202-17
 Appli
Appli
Appli
Appli
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17, Appl
                                                                                            December 6, 2004, 15:26:21; Search time 99 Seconds (without alignments) 32.420 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 8
Sequence 8
Sequence 8
Sequence 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 4
Sequence 4
Sequence 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                       Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/PCT_MEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/RCT_MEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

8: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/US106_PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/US106_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*

17: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*

18: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*

17: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*

18: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*
             GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                     1582122 segs, 356623098 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                    Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                   protein search, using sw model
                                                                                                                                                                                                            BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                    US-10-042-202-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match Length DB
                                                                                                                                                                                1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                        Post-processing:
                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM protein -
                                                                                                                                                                                   Sequence:
                                                                                                                                                                                                                                                     Searched:
                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                               Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
```

```
APPLICANT: Hill, Adian V.S.
APPLICANT: Hill, Adian V.S.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Schneider, Jorg
APPLICANT: Schneider, Jorg
APPLICANT: Plebanski, Magdalena
APPLICANT: Hanke, Tomas
APPLICANT: Hanke, Tomas
APPLICANT: Hill, Geoffrey L.
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
CURRENT APPLICATION WHERE: 2003-09-02
                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 42; DB 14; Length 11; 100.0%; Pred. No. 0.27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 42; DB 16; Length 11; Pred. No. 0.27;
                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                     PEATURE:
CTHER INFORMATION: CTL Epitope of the Malaria String
US-10-079-167-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: CTL Epitope of the Malaria String US-10-653-624-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
              PRIOR FILING DATE: 1997-06-09
PRIOR APPLICATION NUMBER: PCT/GB01/04116
PRIOR FILING DATE: 2001-09-13
PRIOR FILING DATE: 2001-09-13
PRIOR FILING DATE: 2001-09-21
NUMBER OF SEQ ID NOS: 99
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US/09/454,204A
PRIOR FILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: PCT/GB98/01681
PRIOR FILING DATE: 1997-06-09
PRIOR FILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 78
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8
LENGTH: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-833-439-8
; Sequence 8, Application US/10833439
; Publication No. US20040175365A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 8, Application US/10653624
Publication No. US20040131594A1
GENERAL INFORMATION:
APPLICANT: MCMichael, Andrew
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          σ
                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19, Application US/10360836
; Sequence 19, Application US/10360836
; Publication No. US20030188854A1
; GENERAL INFORMATION:
; APPLICANT: Zavala, Fidel
; APPLICANT: Birkett, Ashlet
; TITLE OF INVENTION: USE OF RECOMBINANT HEPATITIS B CORE
; TITLE OF INVENTION: USE OF RECOMBINANT HEPATITIS B CORE
; TITLE OF INVENTION: DARTICLES TO DEVELOP VACCINES AGAINST INFECTIOUS PATHOGENS
; TITLE OF INVENTION: AND MALIGNANCIES
; FILE REFERENCE: 5966/10376
; CURRENT APPLICATION NUMBER: US/10/360,836
; CURRENT FILING DATE: 2003-02-03
; PRIOR FILING DATE: 2002-02-08
; NUMBER OF SEQ ID NOS: 86
; SOOFWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 9;
                                                                                                                                                                                                                                                                                                                    Length 9;
                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                 100.0%; Score 42; DB 13;
100.0%; Pred. No. 1.4e+06;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , Pred. No. 1.4e+06;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 42; DB 14; 100.0%; Pred. No. 1.4e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Publication No. US20030138454A1
GENERAL INFORMATION:
APPLICANT: Hill, Adrian V.S.
APPLICANT: Hill, Adrian V.S.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Scheider, Joerg
TITLE OF INVENTION: Vaccination Method
FILE REFERENCE: 2907.1000-001
CURRENT FILE SCHOOLOST
CURRENT FILING DATE: 2002-02-19
PRIOR FILING DATE: 1999-12-09
                                                                                                                                                                                 TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 17:
US-10-042-202-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: PCT/GB98/01681
PRIOR FILING DATE: 1998-06-09
TELECOMMUNICATION INFORMATION
                                            (202) -721-8250
                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: <Unknown>
                                                               INFORMATION FOR SEQ 1D NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
                       TELEPHONE: (202)-72:
                                                                                                                                                                                                                                                                                                                                                                9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 9; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
CRGANISM: Plasmodium
US-10-360-836-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                              TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 19
LENGTH: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
```

; 0

Gaps

; 0

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Hill, Adrian V.S.

APPLICANT: Hill, Adrian V.S.

APPLICANT: Glibert. Sarah C.

APPLICANT: Schneider. Jozeh C.

APPLICANT: Schneider. Jozeh C.

APPLICANT: Schneider. Jozeh C.

APPLICANT: Blanchard, Tomas

APPLICANT: Blanchard, Tom

ITILE OF INVENTION: Methods and Reagents for Vaccination

ITILE OF INVENTION: Mich Generate A CD8 T Cell Immune Response

FILE REFERENCE: 2907.100-000

CURRENT APPLICATION NUMBER: US/10/686,943

PRIOR APPLICATION NUMBER: US/09/454,204

PRIOR PILING DATE: 1999.10-16

PRIOR PILING DATE: 1999.10-06

PRIOR PILING DATE: 1999.06-09

PRIOR PILING DATE: 1999.06-09

PRIOR PILING DATE: 1997-06-09

NUMBER OF SEQ ID NOS: 78

SOFTWARE FEASESC for Windows Version 4.0
                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Hanke, Tomas
APPLICANT: Smith, Geoffrey L.
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Methods and Reagents for Vaccination
TITLE OF INVENTION: Mhich Generate A CD8 T Cell Immune Response
PILE REFERENCE: 2907.1000-000
                                                                              Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 42; DB 17; Length 11; 100.0%; Pred. No. 0.27; tive 0; Mismatches 0; Indels
                                                                         Query Match 100.0%; Score 42; DB 17; Length 1 Best Local Similarity 100.0%; Pred. No. 0.27; Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; FEATURE:
; OTHER INFORMATION: CTL Epitope of the Malaria String
US-10-833-744-8
; OTHER INFORMATION: CTL Epitope of the Malaria String
US-10-833-745-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 8, Application US/10686943
Publication No. US20040213799A1
                                                                                                                                                                                                                                                                                                                                                                   Sequence 8, Application US/10833744 Publication No. US20040197349A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: McMichael, Andrew
APPLICANT: Hill, Adrian V.S.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Schneider, Jorg
APPLICANT: Plebanski, Magdalena
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 KNKEKALII 11
                                                                                                                                                                                                                                    3 KNKEKALII 11
                                                                                                                                                                                   1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 8
                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INCOMENTION:
GENERAL INCOMENTANTION:
APPLICANT: Hill, Adrian V.S.
APPLICANT: Hill, Adrian V.S.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Schneider, Jorg
APPLICANT: Plebanski, Magdalena
APPLICANT: Blanchard, Toms
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
FILE REFERENCE: 2907.1000.000
CURRENT FILING DATE: 2004-04-28
PRIOR APPLICATION NUMBER: US/10/686,943
PRIOR APPLICATION NUMBER: US/20/454,204
PRIOR FILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-06-09
PRIOR PILING DATE: 1999-06-09
NUMBER OF SEQ ID NOS: 78
NUMBER OF SEQ ID NOS: 78
SOFTMARE: FastSEQ for Windows Version 4.0
                                                                                                                       APPLICANT: Hanke, Tomas
APPLICANT: Hanke, Tomas
APPLICANT: Smith, Geoffrey L.
APPLICANT: Smith, Geoffrey L.
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
FILE REPERENCE: 2907-1000-000
CURRENT APPLICATION NUMBER: US/10/686,943
PRIOR PRILING DATE: 2004-04-28
PRIOR PRILING DATE: 2003-10-16
PRIOR PLILING DATE: 2003-10-16
PRIOR PLILING DATE: 1999-12-09
PRIOR PLILING DATE: 1999-12-09
PRIOR PLILING DATE: 1999-06-09
PRIOR PLILING DATE: 1999-06-09
PRIOR PLILING DATE: 1999-06-09
PRIOR PLILING DATE: 1999-06-09
NUMBER OF SEQ ID NOS: 78
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 42; DB 16; Length 1 Best Local Similarity 100.0%; Pred. No. 0.27; Matches 9; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; FEATURE:
; OTHER INFORMATION: CTL Epitope of the Malaria String
US-10-833-439-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-833-745-8
; Sequence 8, Application US/10833745
; Publication No. US20040191272A1
; GENERAL INFORMATION:
                                                                            Schneider, Jorg
Plebanski, Magdalena
                           Hill, Adrian V.S.
Gilbert, Sarah C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KNKEKALII 9
|||||||||
KNKEKALII 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Unknown
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 8
LENGTH: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
```

ઠે 임 .. 0

```
APPLICANT: McMichael, Andrew
APPLICANT: Hill, Adrian V.S.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Schneider, Jorg
APPLICANT: Schneider, Jorg
APPLICANT: Plebanski, Magdalena
APPLICANT: Banchoffery L.
APPLICANT: Mark, Tomas
APPLICANT: Banchoffery L.
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Wethods and Reagents for Vaccination
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Resp
FILE REFERENCE: 2907.1000-000
CURRENT APPLICATION NUMBER: US/10/653,624
CURRENT FILING DATE: 2003-09-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; FEATURE:
; OTHER INFORMATION: Complete Epitope of Malaria String
US-10-653-624-41
                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US/09/454,204A
PRIOR FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: PCT/GB98/01681
PRIOR FILING DATE: 1998-06-09
PRIOR APPLICATION NUMBER: GB 97 11957.2
PRIOR FILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 78
SOFTWARE: FS845SEQ for Windows Version 4.0
SEQ ID NO 41
LENGTH: 229
                           US20040131594A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JS-10-833-439-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 42; DB 14; Length 229; 100.0%; Pred. No. 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 42; DB 17; Length 11; 100.0%; Pred. No. 0.27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Complete Epitope of Malaria String
US-10-079-167-41
                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: CTL Epitope of the Malaria String US-10-686-943-8
CURRENT FILING DATE: 2003-10-16
PRIOR APPLICATION NUMBER: US/09/454,204
PRIOR FILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-12-09
PRIOR PLING DATE: 1999-16-09
PRIOR PLING DATE: 1999-06-09
PRIOR PLING DATE: 1999-06-09
PRIOR PLING DATE: 1990-06-09
PRIOR PLING DATE: 1990-06-09
SPIOR FILING DATE: 1990-06-09
SPIOR FILING DATE: 1990-06-09
SOFTWARE: FREESEQ for Windows Version 4.0
ELEGTH: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Hill, Adrian V.S.
APPLICANT: Hill, Adrian V.S.
APPLICANT: McShane, Helen
APPLICANT: Reace, William
APPLICANT: Reace, William
APPLICANT: Schneider, Joerg
TITLE OF INVENTION: Vaccination Method
TITLE REFERENCE: 2007.1000-001
CURRENT APPLICATION NUMBER: US/10/079,167
CURRENT FILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US 09/454,204
PRIOR APPLICATION NUMBER: US 09/454,204
PRIOR PILING DATE: 1996-06-09
PRIOR PILING DATE: 1996-06-09
PRIOR PLING DATE: 1997-06-09
PRIOR PLING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: PCT/GB01/04116
PRIOR PLING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: B 00 23203.3
PRIOR PRILING DATE: 2001-09-13
PRIOR PRILING DATE: 2001-09-21
NUMBER OF SEQ ID NOS: 99
SOFTWARE: PEAUSEQ for Windows Version 4.0
SEQ ID NO 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-079-167-41
; Sequence 41, Application US/10079167
; Publication No. US20030138454A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 KNKEKALII 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
ö
                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: MCMINGRAPH, ANOREW
APPLICANT: MCMINGRAPH, ANOREW
APPLICANT: Gilbert, Sarah C.
APPLICANT: Gilbert, Sarah C.
APPLICANT: Schneider, Jorg
APPLICANT: Plebanski, Magdalena
APPLICANT: Plebanski, Magdalena
APPLICANT: Banch, Geoffrey L.
APPLICANT: Blanchard, Tomas
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
CURRENT APPLICATION NUMBER: US/10/686,943
FILE REFERENCE: 2004-04-28
PRIOR PILING DATE: 2003-10-16
PRIOR APPLICATION NUMBER: DC7/GB98/01681
PRIOR PILING DATE: 1999-12-09
PRIOR FILING DATE: 1998-6-09
PRIOR FILING DATE: 1997-6-09
PRIOR FILING DATE: 1997-6-09
PRIOR FILING DATE: 1997-06-09
PRIOR FILING DATE: 1997-06-09
PRIOR FILING DATE: 1997-06-09
PRIOR FILING DATE: 229
NUMBER OF SEQ ID NOS: 78
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 41
LENGTH: DATE
                                                          ö
  100.0%; Score 42; DB 16; Length 229; 100.0%; Pred. No. 6;
                                                          Indels
                                                          .;
0
                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                           Sequence 41, Application US/10833439
Publication No. US20040175365A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: McMichael, Andrew
Query Match
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                 58 KNKEKALII 66
                                                                                                                  1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Unknown
FEATURE:
```

RESULT 10 US-10-653-624-41 ; Sequence 41, Application US/10653624

58 KNKEKALII 66

q

```
PRIOR APPLICATION NUMBER: US/10/686,943
PRIOR FILING DATE: 2003-10-16
PRIOR PILING DATE: 2003-10-16
PRIOR PILING DATE: 1999-12-09
PRIOR FILING DATE: 1999-12-09
PRIOR PLING DATE: 1998-06-09
PRIOR PILING DATE: 1998-06-09
PRIOR PILING DATE: 1998-06-09
PRIOR PRIOR DATE: 1997-06-09
PRIOR PILING DATE: 1997-06-09
SEOFTWARE: FESTER OF WINDOWS VERSION 4.0
SEOFTWARE: PASTER OF WINDOWS VERSION 4.0
SEOFTWARE: PASTER OF WINDOWS VERSION 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 41, Application US/10686943; Publication No. US20040213799A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            58 KNKEKALII 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     58 KNKEKALII 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-686-943-41
                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                       ö
                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Schneider, Joseph P.
APPLICANT: Plebanski, Magdalena
APPLICANT: Hanke, Tomas
APPLICANT: Hanke, Tomas
APPLICANT: Hanke, Tomas
APPLICANT: Blanchard, Toma
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Methods and Reagents for Vaccination
TITLE OF INVENTION: Mothod and Reagents for Vaccination
TITLE OF INVENTION: Mothod and Reagents for Vaccination
TITLE OF INVENTION: Mothod and Reagents for Vaccination
CURRENT FILING DATE: 2004-04-28
PRIOR PLILOR DATE: 2003-10-16
PRIOR PLILOR DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US/09/454,204
PRIOR FILING DATE: 1999-06-09
PRIOR FILING DATE: 1998-06-09
PRIOR FILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 78
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: Methods and Reagents for Vaccination
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
FILE REFERENCE: 2907.1000-000
                                                                   Length 229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 42; DB 17; Length 229; 100.0%; Pred. No. 6; cive 0; Mismatches 0; Indels
                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Complete Epitope of Malaria String US-10-833-745-41
OTHER INFORMATION: Complete Epitope of Malaria String
                                                                Query Match 100.0%; Score 42; DB 16; Best Local Similarity 100.0%; Pred. No. 6; Matches 9; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                              Sequence 41, Application US/10833745
Publication No. US20040191272A1
GENERAL INFORMATION:
APPLICANT: MAILL, Adrian V.S.
APPLICANT: Gilbert, Sarah C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 41, Application US/10833744 Publication No. US20040197349A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: McMichael, Andrew APPLICANT: Hill, Adrian V.S. APPLICANT: Gilbert, Sarah C. APPLICANT: Schneider, Jorg APPLICANT: Plebanski, Magdalena APPLICANT: Hanke, Tomas APPLICANT: Smith, Geoffrey L. APPLICANT: Blanchard, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.
Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                             KNKEKALII 66
                                                                                                                                                                 1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 KNKEKALII 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Unknown
       US-10-833-439-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-833-744-41
                                                                                                                                                                 ઠે
                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: MCMIGAEL, Andrew
APPLICANT: MCMIGAEL, Andrew
APPLICANT: Hill, Adrian V.S.
APPLICANT: Glibert, Sarah C.
APPLICANT: Glibert, Sarah C.
APPLICANT: Schneider, Jorg
APPLICANT: Plebanski, Magdalena
APPLICANT: Plebanski, Maddalena
APPLICANT: Blanchard, Toms
APPLICANT: Blanchard, Tom
TITLE OF INVENTION: Methods and Reagents for Vaccination
TITLE OF INVENTION: Methods and Reagents for Vaccination
TITLE OF INVENTION: Which Generate A CD8 T Cell Immune Response
FILE REFERENCE: 290'.1000-000
CURRENT PRILING DATE: 290'.1000-00
CURRENT PILING DATE: 1999-12-09
PRIOR APPLICATION NUMBER: US/09/454,204
PRIOR APPLICATION NUMBER: ECT/0898/01681
PRIOR PILING DATE: 1998-06-09
PRIOR PILING DATE: 1997-06-09
NUMBER OF SEQ ID NOS: 78
SOFTHARE: PSESEE for Windows Version 4.0
SEQ ID NO 41
LENGTH: 229
                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                   100.0%; Score 42; DB 17; Length 229; 100.0%; Pred. No. 6; cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 42; DB 17; Length 229; 100.0%; Pred. No. 6; cive 0; Mismatches 0; Indels
; OTHER INFORMATION: Complete Epitope of Malaria String US-10-833-744-41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Complete Epitope of Malaria String US-10-686-943-41
```

```
US-10-437-963-105530

Sequence 105530, Application US/10437963

Publication No. US20040123343A1

GENERAL INFORMATION:
APPLICANT: La Rosa, Thomas J.
APPLICANT: Kovalic, David K.
APPLICANT: Thou, Yihua
APPLICANT: Cao, Yongwei
APPLICANT: Wu, Wei
APPLICANT: Buckharov, Andrey A.
APPLICANT: Lib. Ping
TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
CURRENT FILING DATE: 2003-05-14
NUMBER OF SEQ ID NOS: 204966
SEQ ID NO 105530
TYPE: PRT
FEATURE:
FEATURE:
FEATURE:
FEATURE:
FEATURE:
COTHER INFORMATION: Clone ID: PAT_MRT4530_102766C.1.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
92.9%; Score 39; DB 16; Length 119;
Best Local Similarity 77.8%; Pred. No. 11;
Matches 7; Conservative 2; Mismatches 0; Indels
```

Search completed: December 6, 2004, 15:36:08 Job time : 100 secs

1 KNKEKALII 9 |||||||: 82 KNKEKALLV 90

g